Ex 44

BULLETIN

OF THE

American Iris Society

April, 1928

No. 27

GARDEN REPORTS

R. S. STURTEVANT, Editor
ELLA PORTER McKINNEY and MARY J. AVERETT, Associate Editors

CONTENTS

An Iris Roll-call, *J. Marion Shull* 3
Report of Test Gardens, *E. A. S. Peckham, Chairman* 7
Irises at Cornell 10
Brooklyn Botanic Garden, *George M. Reed* 16
New York Botanical Garden 20
Donors to Gardens 22
Some Eastern Iris Gardens, *Sydney B. Mitchell* 23
Science Series No. 2.
Breeding Experiments, *Clyde Chandler* and *A. B. Stout* 31
Writings of Sir Michael Foster—Bibliography, *Ethel Anson S. Peckham* 50
Range in Iris Prices, *Compiled by H. C. Skeels* 52
To-Read or Not-to-Read 56
Brevities 58
Farr Memorial 59
Annual Meeting 60
1928 Field Days in Vicinity of New York City 61
Exhibitions for 1928 62
Bulletins 63

Published Quarterly by
SCIENCE PRESS PRINTING COMPANY, LIME & GREEN STS., LANCASTER, PA.
Subscription price to members $3.00 per year, non-members $4.00 per copy.

MISSOURI BOTANICAL GARDEN LIBRARY
RECEIVED
APR 20 1928

OFFICERS 1928

Directors:

Term expiring 1928:	James Boyd	R. S. Sturtevant
	Mrs. W. H. Peckham	E. B. Williamson
Term expiring 1929:	Dr. W. McL. Ayres	F. B. Mead
	Mrs. J. Edgar Hires	John C. Wister
Term expiring 1930:	Mrs. H. G. Lloyd	J. B. Wallace, Jr.
	A. P. Saunders	Richardson Wright

President—John C. Wister, Clarkson Avenue and Wister St., Germantown, Philadelphia, Pa.

Vice-President—E. B. Williamson, Bluffton, Ind.

Secretary—J. B. Wallace, Jr., 129 Church Street, New Haven, Conn.

Treasurer—Richardson Wright, Graybar Building, New York City.

Regional Vice-Presidents—

Mrs. Thomas Nesmith, 166 Fairmount Street, Lowell, Mass.
Harry F. Little, Baldwinsville, N. Y.
G. Derby White, 253 S. Irving St., Ridgewood, N. J.
E. W. Sheets, 1831 Lamont St., N. W., Washington, D. C.
Mrs. E. K. Lumkin, 973 Prince Avenue, Athens, Ga.
H. S. Jackson, Agri. Exp. Station, W. Lafayette, Ind.
C. P. Connell, 2001 Grand Avenue, Nashville, Tenn.
F. X. Schreiner, R. I. Riverview Station, St. Paul, Minn.
H. T. Judson, Pittsburg Plate Glass Co., 14 and Jones Sts., Omaha, Neb.
Ralph W. Shreve, Farmington, Ark.
David C. Petrie, R. F. D. No. 2, Boise, Idaho.
J. D. Long, Boulder, Col.
Dr. L. J. Ballou, 1409 Medical Bldg., Seattle, Wash.
S. S. Berry, 1145 West Highland Avenue, Redlands, Calif.
J. E. Carter, Guelph, Ontario, Canada.

Chairmen of Committees:

Lantern Slides and Syllabus—Mrs. S. B. Waters, Edgecliff Point, Walnut Hills, Cincinnati, Ohio. Charge of $10.00 for use of slides.
Test Gardens—Mrs. W. H. Peckham, Davenport Neck, New Rochelle, N. Y.
Display Gardens—Mrs. Brewster Hoornbeek, The Maples, Elgin, Ill.
Exhibitions—Mrs. J. Edgar Hires, 107 Linwood Avenue, Ardmore, Pa.
Introductions and Registrations—Charles E. F. Gersdorff, 1829 N. Capitol St., Washington, D. C.
Scientific—Dr. A. E. Waller, Ohio State University, Columbus, Ohio.
Exchange of Rare Species—B. Y. Morrison, 116 Chestnut St., Takoma Park, D. C.

Editor—R. S. Sturtevant, Groton, Mass.

Associate Editors—Mrs. Ella Porter McKinney, Madison, N. J.; Miss Mary J. Averett, Chatham, New Jersey.

THE AMERICAN IRIS SOCIETY

AN IRIS ROLL-CALL—1926-1927

J. Marion Shull

Only when asked how long does the Iris bloom do we realize how little of accurate observation has ever been recorded on this particular point. We speak of certain varieties as being late or early but there appears to be little definite information that would enable us to say just how early or how late a given variety may be, nor have we much reliable data as to how long a well established clump may be expected to remain in bloom, a matter of perhaps greater significance to the average garden than mere lateness or earliness.

A. I. S. Bulletin 14 (p. 65) presents an Iris Calendar covering a number of varieties, but this was for California and under conditions so different from those prevailing elsewhere over the United States as to be of rather limited service to most of us. Besides, not being in graphic form, it is difficult to get its full value without close study.

In presenting the following report in graphic form let it be understood that it makes no claim to being more than it is, a mere visual presentation, averaging two blooming seasons of a limited and perhaps poorly balanced collection of varieties in my garden at Chevy Chase, Md. It needs duplicating in many other localities and over a longer period of years and needs to include a much larger number of the better and best varieties.

The season of 1926 impressed many of us as being somewhat abnormal because of drought and cold, both of which might have some effect upon the time relationships considered. It was to be expected that the cold might throw the blooming period somewhat later in the season than usual, and drought might reasonably be expected to shorten the period of bloom but this would be offset to some extent by the cold which would undoubtedly tend to prolong it. With these things in mind it was thought best to withhold

publication of the results until they could be similarly recorded for another year. Somewhat to my surprise the season of 1927 offered no striking variations either in the order of procession or in the relative duration of the different varieties, the dates in one or two instances being identical with those of 1926 and the usual divergence not amounting to more than one to several days. The graph represents the average date of beginning and ending for the two years and the solid line therefore shows the average duration of each variety, with the space between vertical lines representing a week with actual date at the top.

As said before it is desirable that such records should be kept for a greater number of varieties and over a longer period of years since each year would add to the reliability of the graph arrived at and so I hope many others may set about keeping records of this kind. But for those who would undertake it let it be said that it is much easier to record the beginning date of bloom than the ending date. The arrival of a new bloom is an event and quickly noted, whereas the fading of the last one may take place so inconspicuously as not to be noticed till a week later or maybe not at all in the confusion and abundance of bloom in an extensive garden. As guess work is of no value whatsoever in such a report the only practicable method seems to be a sort of Iris roll-call every day, where the absence would be jotted down as promptly as the arrivals.

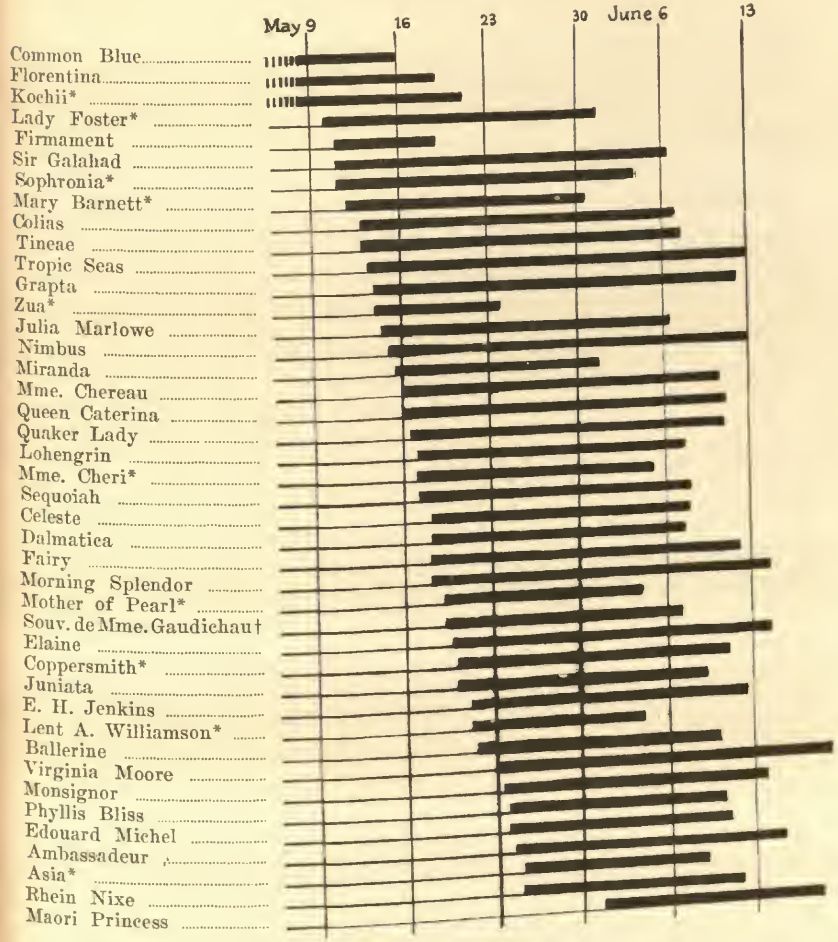
In the garden were many more varieties than those here listed but in too many cases these were represented by a single stem or two of bloom and could not be expected to remain in bloom over as long a period as would a larger clump of the same variety, since length of blooming period is dependent not only on the number of buds to the individual stem but to some extent, and up to a certain point, upon the number of stems in the clump. Only those clumps that were considered fairly representative in this respect have been included in this graph.

For convenience the graph breaks in upon the bloom of Common Blue, Florentina and Kochii toward the latter part of their display and begins with Lady Foster and Firmament on the 10th and 11th of May with the other varieties following in chronological order of their beginning bloom.

The wide discrepancy in length of blooming period is strikingly shown as between Firmament with but 8 days and Zua 10 as compared with Grapta and Tropic Seas each covering a period of more

than four weeks. Larger plantings of these short period varieties would doubtless have added slightly to the length indicated but not sufficiently to make any material difference in the comparison.

A glance at the graph as a whole will disclose other facts of interest. It is evident that later varieties suffer a shortening of the blooming period that is not a defect inherent in the variety but due to the hotter weather prevailing later which hurries them through their flowering activities so that it is completed in less time.



* 1927 only.
† 1926 only.

It is also obvious that a visitor to this collection would have found a greater number of them in bloom during the last week of May than at any other time, 30 of them having been in bloom throughout that week and only 5 of the 42 varieties having finished before that time. A half dozen are still in the beginning stage and only one has not yet begun to bloom.

Lovers of Iris legend and lore will be glad to add to their collections of "Iridiana" the following extract clipped by Mrs. S. O. Scudder, of California, from the Christmas Supplement of the *North China Press* (Shanghai):

"One has to go a long way back to find a purely Christian carol such as the churchmen wrote when their rough and ready flocks were still dancing in church, but there is an Elizabethan book in manuscript preserved in the Balliol College library which gives quite a few. The following verse and chorus will serve as a sample and were presumably written about 1426. There are indeed records of church Christmas dances nearly a hundred and fifty years later.

'For his love, that bowght us dere
Lystyn, lordyngis that ben here
And I will tell you infere
Wher-of com the flowr delice.
Synge we alle for tyme it is
Mary hath born the flowr delice.'

'Infere,' in the third line means together, while the 'flowr delice' is, of course, the *fleur de lys,* the lily, here used as an euphonism for the child Jesus."

REPORT OF TEST GARDENS, 1927

The condition of the Test Gardens may be said to be "improved"—at least the Chairman's knowledge of them is extended! There has been a house cleaning and tidying-up of information. The Committee now has a file with each garden's list of plants in a card-catalogue, which enables rapid checking for needs, etc.

Our Test Gardens are founded by the generosity of members and friends. Gifts have been generous, often when barely a plant could be spared, but naturally this method of acquisition will keep our Test Gardens a few years behind the best private collections. I feel, however, that the situation can be improved, and, at the moment, Captain Schmidt is working out some lists whereby we hope to acquire, through gift and purchase and also through exchange between Test Gardens, needed varieties without over duplication. Already some distribution has been made. Brooklyn and New York gave generously this year to Morton and New York plans to distribute even more this next year to all the Test Gardens.

Morton Arboretum

Mr. C. E. Godshalk, Superintendent of the Morton Arboretum at Lisle, Du Page County, Illinois, writes, "The ground set aside is a large meadow in the Du Page Valley surrounded by our Poplar collection. The top soil is three feet deep and is rich. We are grouping the alphabetical arrangement in the form of a double row surrounding the meadow about 25 feet in front of the Poplars. As soon as we have the plants we expect to form large display groups arranged for color effect in the center of the meadow. A stream runs through the meadow along which we shall display the water loving kinds. In short, I think we shall have an ideal Test Garden. Landscape work is my profession and I can assure you that we shall endeavor to make this one of the most attractive Test Gardens you have."

A review of the different collections shows Morton (our newest Test Garden) possessing the *smallest number of varieties but the highest standard of quality*—encouraging progress! Many varieties are needed at Morton and I hope the members will be generous and send plants of good garden sorts from their surplus. A great quantity is needed for color masses in the landscape work projected for the garden. I suggest for this purpose plants of clear color and no blends except they be light ones, or are the finer

sorts such as Ambassadeur, Prosper Laugier, or Bruno (!). Of the highly rated varieties we would be grateful for a single plant, even, of any one of them, and especially does this garden need the Apogons and all native iris The Dwarf Bearded, too, are sadly lacking in this collection.

Contributions should be sent to Mr. C. E. Godshalk, Morton Arboretum, Lisle, Du Page Co., Illinois.

Cornell University

The Test Garden at Cornell University was made the object of official visit this year. Never having seen Ithaca I was both surprised and delighted with the superb situation of Cornell. The view from all parts of the campus is fine and the purity of the air must be salubrious not only for the students, but for the plants growing thereabout.

Though one has to climb great hills and cross gorges to reach the University, the Agricultural College is well placed amid large plateaus and rolling hills with rushing streams. The University is rich in land, measured not in acres but in miles!—"Our line goes out six miles toward those hills," said an official.

The Iris Test Garden is in a natural basin, one third of its rim encircled by a river with lightly wooded and rocky shores, and the other two thirds by low curving hills. The Garden is level with the Service buildings at one side. The irises are planted in long narrow beds, each variety in a block, and with the large number of plants the effect is excellent. I was pleased with the evidence of care in culture. The growth as a whole was more stunted than it would be in a more favorable climate, but there was a wealth of bloom—the flowers smaller on an average, due to climate also. The soil seems well suited to the bearded irises, and I believe with the careful cultivation given, the growth and size of bloom would be above the average with less rigorous winters. There are 978 varieties at Cornell—many old and supposedly obsolete. The collection needs new varieties both to raise the standard and to test for hardiness—this test would be especially valuable because of the good soil and cultural care.

Again we noted that pale yellow irises are outstanding in a large plantation, and of all the varieties seen at Cornell, old and new, of any color, Aliquippa (Hall 1924) was, in my opinion, the best. Certainly this is a fine yellow and approaches what we are looking

for—a good garden variety of stamina, producing large flowers of clear pale yellow.

Dr. Wright now has a number of the Dwarf Bearded varieties in his garden for study. He and Mrs. Wright have done a tremendous amount of research work in this connection.

Mr. Alfred M. S. Pridham is now in charge of the Iris Test Garden and is an indefatigable worker and a great help in many ways.

While in Ithaca we were guests of Colonel and Mrs. J. C. Nicholls who showed us marvelous hospitality. We had an opportunity to examine Colonel Nicholls' irises, and were much interested in his and his son Jesse's breeding experiments. They have a promising white seedling.

At the Test Garden we were met by Professor E. A. White, Head of the Department of Floriculture, by Dr. and Mrs. Albert H. Wright, by Mr. A. W. W. Sand (whose voluminous descriptions made while in charge of the Test Garden are so useful in our work), and by Mr. Pridham. During our visit we also made the acquaintance of Mr. Donald T. Ries, now doing research work for us on Iris Pests.

Missouri Botanical Garden

At the Missouri Botanieal Garden, St. Louis, Missouri, we now have 1050 authentic varieties after checking all synonyms. This is a considerable increase over last year. However, there is extant a list (given to Dr. Moore by Mr. Wister) of 180 additional names of possible varieties, and there must be about one hundred newer sorts—making in all nearly three hundred more that might be put into this garden. We hope the contributions will continue. If we could only get these collections complete and fairly alike we could begin the much needed study of checking growth in different localities.

I wish to take this opportunity to thank all who have contributed to the Test Gardens through gifts or through work. The slightest effort is recognized and deeply appreciated by this Committee.

Respectfully submitted,
Ethel Anson S. Peckham,
Chairman, Test Gardens.

Taken by Mrs. A. A. Wright

CORNELL IRIS TEST GARDEN, JUNE, 1927

Left to right: Dr. Albert H. Wright, Miss A. M. Van Deman, Mr. Alfred M. S. Pridham, Mrs. Wheeler H. Peckham, Col. Jesse C. Nicholls, Mr. Austin W. W. Sand, Dr. Edward A. White, Mr. Jesse C. Nicholls, Jr.

IRISES IN THE TEST GARDEN AT CORNELL, NOVEMBER, 1927

Abbey's Letter No. 1, No. 2, No. 3
Abdul Aziz
Abu Hassan
Acquackanonk
Ada
Admiral Togo
Adonis
A. E. Kunderd
Afterglow
Agathocles
Agnes
Aika
Aksarben
Alba
Albâtre
Alboa
Albatross
Albicans
Alcazar
Alfred Fiddler
Alice Barr
Alice Osgood
Alida
Aliquippa
Alphonse
Alvares
Amabilis
Amas
Ambassadeur
Ambigu
A. M. Brand
Ambrose Wiseman
Anna Farr
Anne Bullen
Anne Leslie
Annie Jane
Anosia
Antonia Antonette
Antonio
Aphylla (DB)
Apollon
Arabesque
Aragon
Archeveque
Ardenta
Argentea
Argentine
Argus
Argynnis
Arjemand
Arlequin Malinais
Armée d'Orient
Armenian
Arnols
Arsace
Asiatica

Assyrian
Assyrie
Astarte
Athene
Atlas
Atrocaerulea (DB)
Atropurpurea
Atroviolacea (DB)
Attraction
Augustina
Aurea
Aurea maculata (DB)
Australis
Autocrat
Aurora
Avalon
Avatar
Avenir
A. W. Blakeley
A. W. Latham
Aymard
Azrael
Azurea (DB)
Azure Glow

Bacchus
Balboa
Balder
Ballerine
Bancis
Baronet
Barton Harrington
Baxter
Beaconsfield
Beatrice
Beau Ideal
Beauty
Beethoven
Belgica
Belladonna
Bellorio
Belshazzar
Benacensis
Benbow
Berchta
Betsy Presby
Bianca
Biflora (DB)
Biflora maculata (DB)
Biliotti
Bismark
Black Knight
Black Prince
Blanche
Bliss E. 171
Bliss G. 100
Bliss R. 123
Bliss R. 161
Bliss R. 171
Blue Beard (DB)
Blue Bird
Blue Boy
Blue Jay
Blue King
Blue Lagoon
Blue Sky
Bluestone (DB)
Bluet
Boccage
Boismilon
Bosniamae (DB)
Bougère
Brabant
Brandywine
Bravura
Bridesmaid
Brilliant
Britannicus
Brionensis
Bronze Beauty
Bronze Lady
Bronze Stoffels
Brooklyn
Buriensis
Buriensis Elizabeth
Butterfly
B Y. Morrison

Caerulea (DB)
Caesar
Calypso
Cameleon
Camelot
Cameo
Canary Bird (DB)
Candelabre
Candicans
Candida (DB)
Canopus
C. A. Pfeiffer
Caporal
Caprice
Caroline E. Stringer
Carthusian
Catalosa
Caterina
C. D. Hayes
Cecil Minturn
Celeste
Celestine
Celia
Cengialti
Ceres
Chalcedonica
Chalice
Chamaeiris alba (DB)
Chamaeiris albiensis (DB)
Chamaeiris aurea (DB)
Chamaeiris italica (DB)
Charles Darwin
Charles Dickens
Charmant
Chartier
Chateaufort
Chelles
Chereon
Cherubim
Chester Jay Hunt
Cinderella
Cinnibar
Citrea (DB)
Clarence Wedge
Clarissa
Clarissima
Clematis
Cleopatra
Cluny
Col. Candelot
Col. Duchat
Colonial Dame
Comanche
Commodore
Como
Comtesse d'Hauteville
Conspicua
Conspicuous
Contrast
Cora
Cordelia
Cordon Bleu
Corrida
Cottage Maid
Courcy
Crépuscule
Crimson King
Cristata
Cristata alba
Crusader
Cubero
Curiosity
Curlesque
Cyanea (DB)
Cypriana
Cythera

Daisy Hill
Dalila
Dalmatica
Dalmarius
Damozel
Dandy
Darius
Dauphin
Dawn
Decazes
Dejazet
Delicata
Delicatissima
Demi Deuil

Demure
De Suze
Deuil de Charles Thelotte
Diadem
Diamond
Diana
Dianto
Die Fee (DB)
Dimity
Ditton Purple (DB)
Dixmude (DB)
Dolphin
Donald Maxon
Donna Maria
Dora Longdon
Dorothea
Dorman
Drake
Dreamlight
Dr. Andrist
Dr. Bernice
Dr. Hidershide
Dr. Mantor
Dr. Sanford
Duchess of Wellington
Duquesne
Dusky Prince

Eclipse
Eden Phillpotts
Edina
Edith
Edith Cavell
Edith Cook
Edouard Michel
Edward Simmons
Elberon
Eldorado
Elinor
Elizabeth
Elsinore
Ember
Emile Chouvet
Emilie
Emir
Emma Beal
Empire
Empress
Empress of India
E. M. Roenig
Enchantress
Erich
Erigone
Esperance
Etta
Eugene Sue
Eugene Verdier
Excelsa (DB)

Fairy (DB)
Fairy
Fairy Queen
Fantasy
Faustine
Favorite
F. B. Schemerhorn
Fenella
Fieberi (DB)
Fille d'Eve
Firmament
Flammenschwert
Flavalba
Flavesard
Flavescens
Flavissima
Florence Barr
Florence Wells
Florentina
Florentina purple
Floribunda
Florida
Fontarabie
Formosa
Fortuna
Foster's Yellow
Frank M. Thomas
Frederick
Frère Ernst
Freya
Fritjof
Fro
Frorin
Fryer Glory
Fulda
F. W. Needham

Gagus
Ganymede
Garrick
Gaviota
Gaythorne Hardy
General Grant
Geo. J. Tribolet
Georgia
Geraldine
Gerda
Germaine le Clere
Germanica
Gertrude
Gisele
Gladstone
Glee (DB)
Glitter
Gloire de Hillegom
Gloriette
Glory of Reading
Gold Bound
Gold Crest
Golden Fleece
Golden Plume
Gold Imperial
Goldweir
Goliath
Gorgeous (DB)
Gov. Hughes
Gracchus
Graminea
Gray Morn
Greater May Queen
G. W. Penke
Gypsy Queen

Hakador
Halfdan
Hannibal
Harlequin (DB)
Harriet
Harriet Presby
Hautefeuille
Hawthorne
Haydee
H. Cramer
Hebe
Hector
Helene Koehler
Helen Francis
Helge
Helvetia
Hera
Herant
Hereward
Her Majesty
Hermione
Hercules
Hesperia
Heterant
Hiawatha
Hippolyte Pernet
His Eminence
Hokanum
Homer
Honorabile
Hopatcong
Hope
Hubert
Hugo

Idion
Ignacite
Igouf
Imperial King
Improved King
Inca
Incognita
India
Indian Maid
Inez
Ingeborg
Inner Glow
Innocenza
Iroquois

Iris King
Isis
Ismali
Isola
Isoline
Ivanhoe
Ivorine
Ivy Logan

Jacquesiana
Jacqueline Guillot
James Boyd
Jaune Paille
Jean Holbein
Jeanne d'Arc
Jean Sisley
Jenny Lind
Jessie McInnes
John Bright
John Bull
John Fraser
Jordeans
Josephine
Josephine (DB)
Joya
Jubilee
Judith
Jules Cretien
Jules Pirot
Julia Marlowe
Juliette
Jungfrau
Juniata
Junonia
Justinian

Katherine E. Lees
Kathryn Fryer
Kermesina
Kharput
Khedive
Kimballiae
King Christian
King George V
King Karl
Kochii
Kochosum
Korolkowi
Koya

La Beauté
Lady Foster
Lady Jane
Lady Jellicoe
Lady Seymour
Lady Stump
L'Africaine
Lance
La Neige
Languedoc
La Nuit
La Perle
La Rosse
Laura
Laurentinus
La Vallette
Lavandulacea
Lavater
Leander
Le Bouvet
Leda
Lent A. Williamson
Leonidas
Leopold
Le Pactole
Le Seble
L'Esperance
Letty C. Dean
Leverrier
Lewis Trowbridge
Leyland Huckfield
Liberia
Libra
Lilacina
Lillian Rose
Lizzie
Lobelia (DB)
Lodestar
Lohengrin
Loie Fuller
Lois
Lona
Loppio
Lord Grey
Lord of June
Lord Salisbury
Lord Wolseley
Loreley
Lorraine Morgan
Louera
Louise de Savisse
Louis Levêque
Louis Van Houtte
Loute
Lowace
Lucida
Lugarda
Lunette
Lurida (DB)
Lurline
Lygia
Lynette

Macila
Macrocarpa (DB)
Madcap
Madison Cooper
Mady Carriere
Maggie
Magnate
Magnifica
Magnificence
Maia (DB)
Maid Marian
Major
Malvina
Ma Mie
Mandalay
Mandraliscae
Maori King
Marcus
Marenco
Mareschal
Margaret (DB)
Margaret Moor
Margaret Sheridan
Marginata
Marian
Marian Mohr
Marie Corelli
Marie Therese
Mariposa
Maritana
Marjolin
Marmora
Marocain (DB)
Mars
Marsh Marigold
Mary Barnett
Mary Garden
Mary Gray
Mary Minanelle
Mary Williamson
Massasoit
Matador
Mathiola
May Morn
May Rose
Maurelie
McKinney No 5
Medallion
Medina
Medrano
Mephistopheles
Mercedes
Merlin
Mexicana
M. G. Peters
Midas
Midwest
Mikado
Mildred Presby
Minerva
Minnehaha
Minnesota
Minsart
Mirage
Miralba
Mireille
Miss Eardley

Miss Georgiana
Miss Rowe
Miss White
Miss Willmott
Mist
Mistral
Mithras
Mlle. Schwartz
Mme. Baze
Mme. Blanche Pion
Mme. Boullet
Mme. Chereau
Mme. Chobaut
Mme. de Brabant
Mme. de Sévigné
Mme. Emma Nevada
Mme. Guerville
Mme. Jenneaux
Mme. Louesse
Mme. Modeste
Mme. Thibault
Modeste Guerin
Molière
Monhassan
Monsignor
Montezuma
Montour
Montserrat
Moonstone
Moor
Morning Splendor
Morphée
Mort Sanford
Mother of Pearl
Mount Penn
Mount Royal
Mrs. A. M. Brand
Mrs. Andrist
Mrs. Bossart
Mrs. Christman
Mrs. Cowley
Mrs. Curtis
Mrs. Fryer
Mrs. G. Darwin
Mrs. Hagler
Mrs. Hayes
Mrs. Hettie Matson
Mrs. Horace Darwin
Mrs. Kesselring
Mrs. Kimball
Mrs. Lodge
Mrs. Neubronner
Mrs. Paul B. Riis
Mrs. Reuthe
Mrs. Sanford
Mrs. Smith
Mrs. W. E. Fryer
Mrs. Woodhouse
Munico
Munite
Murat
Muta
My Lady

Nana alba
Nana candida
Nanus
Naomi
National
Naushon
Navajo
Neglecta
Negus (DB)
Nellie Quinn
Nelly
Nemours
Nepalensis
Neptune
Niebelungen
Nimrod
Nine Wells
Niobe
Nokomis
Notha
Nothung
Nowhana
Nudicaulis (DB)
Nudicaulis purpurea
Nucé d'Orage
Nymph

Ochracea
Ochracea cærulea
Odoratissima
Old Glory
Old Ivory
Olivier Perthuis
Opera
Ophelia
Oporto
Orchid
Oriflamme
Orleans
Osis
Ossian
Othello

Pacquita
Pajol
Palaurea
Pallissy
Pallida
Pallida Dalmatica
Pameron
Panerace
Paradis Terestria
Parc de Neuilly
Pariensis
Parisinna
Parkmani
Patience
Pauline
Paxatawny
Pegasus
Penelope
Perfecta
Perfection
Perle
Perry Favorite
Perry's Blue
Petite Amie (DB)
Petit Vitry
Petrel
Pfauenage
Phidias
Pink Pearl
Plumeri
Pocahontas
Poiteau
Powhatan
Prairie Queen
President Thiers
Prestige
Prince Charming
Prince Lohengrin
Prince of Orange
Prince Victor
Princess Beatrice
Princess Elise
Princess Osra
Princess of Teck
Princess Royal
Princess Victoria Louise
Priscilla
Prof. Seeliger
Profusion
Proserpine
Prosperity
Prosper Laugier
Prospero
Pseudacorus
Pumila alba (DB)
Pumila atroviolacea (DB)
Pumila hybrida bicolor (DB)
Pumila lutea (DB)
Pumila purple (DB)
Purple and Gold
Purple King
Purple Lohengrin
Purple Violet

Quaker Lady
Queen
Queen Alexandra
Queen Caterina
Queen Elinor
Queen Flavia
Queen Mary

Queen of May
Queen Victoria

Racine
Radiance
Raffet
Rakan
Ramapo
Rangoon
Ranikhet
R. C. Rose
Red Cloud
Red Riding Hood
Regan
Regina
Reichenbachi (DB)
Rembrandt
Reticulata
Reticulata alba
Rev. S. H. Smith
Rev. Wurtelle
Rhein Nixe
Rhoda
Rialgar
Richard II
Ring Dove
Rip
Rita
Riva
Rodney
Rolandiana
Romany
Romeo
Rosalba
Rosalind
Rosedale
Rose Salterne
Rose Unique
Rose Valley
Roseway
Rotorua
Royal
Royal Purple (DB)
R. R. Smith
Ruby
Rubyd
Ruby Queen
Rugajo
Ruth Pfeiffer
Ruth Rand

Salar Jung
Sambo (DB)
Sambucina
Samson
San Gabriel
Sanguinea (DB)
Sans Souci
Sapho
Sapphire (DB)
Sarabande
Sarah
Sarsandra
Sass No. 21
Sass No. 4–11.
Sass No. 4042
Saturnus
Saul
Savignian
Sceptre
Schiller
Schneekuppe (DB)
Schwanhilde
Sea Gull
Seminole
Shekinah
Shelford Chieftan
Shelford Yellow
Sherbert
Sherwin Wright
Shotsham
Shrevi
Shrewsbury
Silvia
Simide
Simplicity
Sindjkha
Sir Galahad
Sir Robert Peel
Sir Trevor Lawrence
Sivas
Smoky Pearl
Socrates
Socrates (DB)
Soeur Superieure Albert
Solana
Soledad
Souv. de Charles Napier
Souv. de Mme. Gaudichau
Souv. de Prince Chaquerand
Sparte
Speciosa
Spectabilis
Sperling
Spuria
Spuria alba
Spuria aurea
Spuria foliis variegatis
Standard (DB)
Standard Bearer
Stanley
Statellae (DB)
St. Clair
Steepway
Stenophylla (DB)
Sudan
Sultane
Sun King
Susan Bliss
Suzanne Autissier
Swatara
Sweet Lavender
Swerti
Sylphide
Sylvester
Sylvia Lucas
Sympathy

Taffeta
Tamar
Tamerlan
Tante Aurora
Tecumseh
Tenax
Tendresse
Terias
The Bride (DB)
Thecla
The Inca
Thelma Perry
The Moor
Theresita
Thora
Thorbecke
Thun
Tineae
Titus
Tom Tit
Toreador
Trautlieb
Tregastel
Trianon
Tristram
Trocelestial
Trojana
Tromagnifica
Troost
Tropic Seas
Trosuperba
True Delight
Truth

Undine
Unique
Ute Chief

Valery Mayet
Van Geertii
Vauvel
Venus
Venusta
Verbena
Verdun (DB)
Versicolor
Victorine
Victor Verdier
Viking
Viola
Violacea grandiflora

Violet Episcopal
Violet Queen
Virgile
Virginia Moore
Virginie
Vondel

Walhalla
Walneri
Walter Reuthe
Wanaque
Wawayanda
Weequahic
Western Dream
W. F. Christman
W. H. Eller
Whiffenpoof
Whim
White Bride (DB)
White Knight
White Nymph
White Queen
William Marshall
Willie Barr
Windham
Windjammer
W. J. Fryer
Woodland
Wyomissing

Yellow Hammer
Yellow Moon
Yellowstone
Yvonne Pelletier

Zephyr
Zua
Zullichau (DB)
Zwanenburg

BEARDLESS IRIS TRIAL GARDEN AT THE BROOKLYN BOTANIC GARDEN

GEORGE M. REED

Japanese Iris (*Iris Kaempferi*). The established plants of Japanese Iris gave abundance of bloom during the past season. The first flowers appeared on several varieties on June twenty-sixth and continued daily until August first, when the last buds on two varieties opened. The flowers were of fair size and consequently the material was very satisfactory for making comparisons between the different plants. As a result, progress was made in the description and identification of the varieties. Many similar or identical plants were found under entirely different names, as well as the same name applied to entirely different plants. For the most part these were straightened out and the correct identification of the variety secured.

There are serious difficulties in correctly identifying the varieties. The original descriptions are often not available. Further, they usually lack sufficient detail to identify correctly a particular plant. Sometimes it is not even stated whether the variety is single or double-flowered. Since seedlings are readily grown and may resemble quite closely named varieties the problem of correct identification is greatly increased.

An attempt was made to classify the named varieties primarily on the basis of color. At different times flowers of many were collected and arranged according to color schemes. The classification and grouping finally worked out seemed to hold fairly well for the varieties considered. It is planned to submit this scheme, includ-

ing the position of the known varieties, to the members of the Iris Society in the near future so that they may be able to test it out during the coming season.

There were several noteworthy additions to the collection of varieties during the past year. At the end of 1926, 29 varieties were received from Vilmorin-Andrieux et Cie. These came in the midst of winter, but were carried over in the greenhouse and cold-frames and set out in the field in early spring. Practically every plant survived, and many of them bloomed during the current season. A collection of 37 varieties of Japanese origin was received from the Donard Nursery, Ireland. These reached us in very poor condition in May instead of in March. However, practically every variety has shown signs of growth and while the likelihood of bloom next year is not great, yet the plants are growing and in time will doubtless flower. The 18 new varieties of J. A. Kemp, Little Silver, New Jersey, were also obtained. John Lewis Childs, Inc., presented us with their collection of 21 newly named varieties.

During the fall all of the older established varieties were divided and transplanted to new beds. As far as possible, these were arranged for planting according to the color classification scheme previously worked out. It will thus be possible to observe next season the varieties of similar color growing close together.

A new set of experimental beds was started in the spring. These are primarily concerned with tests of mineral fertilizers: Nitrate of Soda, Bone Meal, Acid Phosphate, Aluminum Sulphate, and Lime. Ten different plots were laid out in which five plants of each of five named varieties were placed. No very obvious differences were observed during the course of the past season.

There are, however, a number of serious difficulties in such experimental beds. The divided plants grow very unequally, and thus the size and vigor of the plant may not be in direct response to the fertilizer at all. Seedlings would probably serve as better material. Here again, however, there is a very great difference in the vigor of the seedlings from the same planting. Probably the most that we can hope for is a very general indication as to the response of the plants to the different fertilizers.

The most discouraging feature has been connected with diseases. Our primary problems with the Japanese Iris were originally concerned with identification and classification. Pathological problems, however, have come to the front, and certain diseases are

responsible for a high mortality among our plants. We have in previous years referred to the characteristic fibrous root rot. This is to be sharply distinguished from the rhizome rot so common among the Bearded Iris. This year the disease occurred in the usual amount, and resulted in the loss of individual plants here and there in the beds. In some cases the affected plant recovered, but produced no bloom. During the past year we had a severe attack of a disease of the foliage. The most obvious symptom is the appearance of a rosy coloration on the upper side of the leaves, especially where they more or less clasp each other or the stem. Where the disease was severe and early, the plant failed to bloom, dying down more or less completely to the ground. If, however, the disease appeared later, flowers seemed to be fairly normal. A species of fusarium has been isolated with great regularity from these discolored leaves, and may be responsible for the diseased condition. A similar organism has been isolated from the fibrous roots, and it may be that the same organism is responsible for both conditions. Much further work, however, is necessary to clear up these points.

A large number of Japanese Iris seedlings are now growing. The seeds of many of these have been collected from named varieties, while others have come from crosses between two known varieties. A few bloomed this year, and next year we should have an abundance of flowers on most of these plants. Additional crosses have also been made between certain varieties.

Siberian Group. Practically all of the varieties were transplanted in the fall of 1926 and as a result the plants showed a lack of their usual vigor in height and size of bloom. Consequently, the material was not as suitable for study as it should have been. However, they have grown quite well and by another year excellent material should be available. A few additions to the collection were made, Mrs. Francis E. Cleveland sending us some of her new named seedlings. A large number of seedlings grown from seed of named varieties and also seed obtained from crosses are being grown. Many of these will bloom during the coming season.

Miscellaneous Beardless Iris. Several species and varieties of the Spurian Group gave satisfactory bloom during the past year. A number of species, such as *aurea, ochroleuca, spuria, ensata, Sintenisii, missouriensis, Forrestii, chrysographes, Wilsoni* and *versicolor*, are well established and flowered. Considerable data

have been obtained as to the possibility of crossing many of these species.

One of the most interesting features was the seedlings of various species. The seeds were obtained from a variety of sources under an assortment of names, and most of the plants bloomed this year for the first time. A few of them corresponded with the name under which they were received. The majority, however, were identified as *Iris halophila,* and showed considerable variation in the size and color of the flower. While the individual flowers were small, yet the abundance of blossoms on the plants gave an interesting mass effect.

Many additions were made to our collection of watercolor illustrations. Since the material available was satisfactory, Miss Maud H. Purdy was able to paint not only a number of the different varieties, but a few of the species as well. We now have a very good collection of these watercolors showing the range of color and form in the varieties of Japanese as well as other groups.

The additions to our collections of Beardless Iris during 1926 and 1927 are herewith presented. The plants received in 1926 are included, since no record of these has been published in the Bulletin.

Japanese Iris

Donated

Elliott Nursery Co., Pittsburgh, Pa.	12 varieties
Henry A. Dreer, Philadelphia, Pa.	12 "
Julius Roehrs Co., Rutherford, N. J.	10 "
W. Atlee Burpee Co., Philadelphia, Pa.	5 "
John Lewis Childs, Inc., Flowerfield, N. Y.	21 "
A. B. Bauer, Richmond, Va.	8 "

Purchased

Barr & Sons, England	53 "
Vilmorin, Andrieux et Cie, France	29 "
Donard Nursery Co., Ireland	37 "
J. A. Kemp, Little Silver, N. J.	18 "

Siberian and Miscellaneous Beardless Iris

Donated

John B. Wallace, Jr., New Haven, Conn.	1 variety
Robert Wayman, Bayside, Long Island	2 varieties
H. S. Jackson, Lafayette, Ind.	1 variety
Frank W. Campbell, Detroit, Mich.	5 varieties
Mrs. W. G. DuMont, Des Moines, Ia.	2 "
W. Atlee Burpee Co., Philadelphia, Pa.	2 "
Mrs. J. Branin, San Lorenzo, Calif.	7 "
Mrs. L. W. Hitchcock, New Rochelle, N. Y.	2 "
Mrs. Frances E. Cleveland, Eatontown, N. J.	8 "
Mrs. Charles H. Stout, Short Hills, N. J.	1 variety
Mrs. C. S. McKinney, Madison, N. J.	2 varieties

Purchased

J. A. Kemp, Little Silver, N. J.	1 variety

JUDGING IRIS, JUNE, 1927, AT NEW YORK.
Richardson Wright, Miss McIlvaine.

NEW YORK BOTANICAL GARDEN 1927

Alphabetical Garden

The plants were checked over when in bloom, and fourteen mistaken varieties were discarded. The vacancies will be filled, probably, from plants received at a later period and held in a reserve bed. There are still many of the original gaps, perhaps because the varieties are obsolete. The bloom was very fine in this garden. Some of the larger clumps were divided and the surplus distributed. It is planned to *thin* and distribute in 1928 where needed in other plantings and to other Test Gardens.

Color Planting

Here the plants were checked also, mistakes corrected, and gaps filled by dividing and spreading. New plantings were made of sixty-one additional varieties (257 plants) to fill empty spaces and some large groups were cut down to allow the addition of a better sort. Bloom was good and should be excellent next season. As far as the color scheme was concerned, the best effect was made by a bed of variegatas and blends, Sherbert in the middle! The worst

arrangement was the blue bed where monotony reigned. We plan to introduce a few groups of another color into this section to relieve the pale blue gloom. Unfortunately the great amount of rain, more than twice the normal, in July and August, caused the soil on the slopes to wash over the plants and, though the efforts to extricate the plants were incessant, it is feared some varieties received a severe set-back. Labels will be changed to read correctly (we hope) for next season. A number of plants were taken from this planting to be used as prizes at the A. I. S. Show held in New Rochelle in June. This seems a worth while way to use the surplus of good varieties.

The beds on the fringe of the color planting were house-cleaned. Thirty-four poor varieties were discarded, only a plant or two being retained for the A. B. C. Garden and for specimens to be sent to the other Test Gardens. These varieties were found to be very old ones and, in many cases, supposed to be obsolete. They came to the N. Y. Botanical Garden through an importation from Messrs. Turbat a number of years ago.

Beardless Garden

Many native varieties were added through the unfailing zeal of Dr. John K. Small. There was severe loss during the winter of 1926-27 but the gaps have been filled and the test will be made again this winter. We need more varieties of Sibiricas, etc., and beg for contributions of the newer sorts.

Nursery

Around this, a wonderful new fence, animal and thief resisting! Let this encourage our members to send in their seedlings for trial. New ground has been dug and the collection of species to be used by Dr. Stout and Miss Chandler in the breeding work is going ahead slowly but surely. Seventeen varieties were purchased from H. Correvon, fourteen from C. G. Van Tubergen & Co., one from Stumpp & Walter, two from Carl Purdy, and B. Y. Morrison gave ten, while the Royal Botanical Gardens at Kew, England, gave three varieties. Additional varieties are being ordered from Perry. The seeds from the crosses made by Miss Chandler have been planted and the seedlings from Mr. Moore's crosses of the year before are growing nicely.

Dr. Small has filled a large portion of the nursery with native irises collected last spring, a few of which bloomed this Autumn and were painted. Some of these new native irises were potted and some planted in the Test Garden. To give an idea of the magnitude of Dr. Small's collections this year, there are: in pots—72 varieties, 412 plants; in the Nursery—72 varieties, 2099 plants; in the Field—67 varieties, 460 plants!

In the Trial Plot where the irises are planted to be judged for garden value the first planting, judged in 1926 and 1927, was cleared out. The plants were distributed among the Test Gardens and, where so desired, were returned to the originator. These owners were more than generous in giving their plants freely and it is hoped that the color planting will show a marked improvement due to this influx of material of a high standard. When checking the plants it was discovered that the plant thought to be Jacinto the year before was something else. The supposed Jacinto more nearly resembled Alcazar and received a black eye from the judges as not being outstanding. Meanwhile the "Custode" had seen the real Jacinto and realized the substitution. The mysterious plant is now growing along side the real thing to be compared at blooming time and a report will be made.

The A. I. S. again should thank sincerely the faithful men who work among all these plants.

Donors to the N. Y. Botanical Garden

J. K. Alexander
William H. Arnold
S. Stillman Berry
Miss Mary Bissell
Mrs. M. E. Black
F. W. Campbell
Mrs. R. M. Davis
Mrs. M. I. De Graff
The Garden of Arcadin
Prof. Robt. A. Greene
C. H. Hall
Howard Judson
Frank Koehler
Mrs. C. S. McKinney
J. J. Moffitt, Jr.
F. Cleveland Morgan
B. Y. Morrison
Col. J. C. Nicholls
Mrs. W. H. Peckham
O. M. Pudor
Ramsey's Austin Nursery
Royal Botanic Gardens, Kew, through W. J. Bean
H. P. Sass
Jacob H. Sass
Mrs. A. H. Scott
J. Marion Shull
Jacob Shulz
Miss Sturtevant
Howard Weed
E. B. Williamson

Donors to the Test Garden at Cornell, 1927

Bobbink & Atkins
Henry T. Coe
Granite State Nurseries
Frank Josifko
A. E. Kunderd
Longfield Iris Gardens
N. Y. Botanical Garden
Col. J. C. Nicholls
E. A. S. Peckham
C. A. Pfeiffer
Stone Crest Gardens
Vaughan Seed Stores
Robert Wayman
Wayside Gardens

Donors to the Test Garden, Missouri Botanical Garden, 1927

Dr. E. O. James
Dr. N. Jenison
Longfield Iris Gardens
New York Botanical Garden
Mrs. E. A. S. Peckham
Mr. Carl Salbach
Mrs. Grace Toof

Donors to the Iris Test Garden, Morton Arboretum, 1927

O. M. Becker
Lee R. Bonnewitz
Brooklyn Botanic Garden
F. W. Campbell
N. Y. Botanical Garden
Mrs. W. H. Peckham

SOME EASTERN IRIS GARDENS THROUGH CALIFORNIAN EYES

Sydney B. Mitchell

It is unfortunate that some of our lesser iris breeders believe so firmly in the old adage that comparisons are odious. While judging at a midwestern iris show last season, I innocently asked why a certain breeder submitted no seedlings for awards, and was told that he never exhibited, and, in fact, grew nothing but his own seedlings, with the inevitable and (to him) satisfying but otherwise deplorable result that they were the finest irises he had ever seen. In the case of other and less selfsatified breeders, the difficulty has been in their isolation or in the cost of buying and growing for comparison all the new introductions. This latter is a very real item in the cost of breeding, for the breeder should see the very best, and these are high in price when they are new and the stock is small. Consequently, I consider myself most fortunate in that I was teaching at the University of Michigan last year, and was able to visit many breeders and growers whose gardens I had not seen on my visit East in 1926.

As I had a large collection of irises in my garden in Montreal twenty years ago, the best that Barr and Perry then listed, I knew something of growing conditions other than in our highly favorable California climate. It was, then, most interesting to see how actual conditions checked up with the published prejudices of those who. embittered by lack of success in peculiarly wet soils or locally abominable climates, extended their limited conclusions to cover half a continent. It was also amusing to note in many roadside gardens, particularly in New England, the prevalence of a few old, old bearded irises such as Honorable, Flavescens, and a certain

dingy squalens. There must be millions of these. Indeed, if one did not know where the newer and better irises were to be found, one might suppose there were no others, just as an Easterner visiting California in March might think we grew only Albicans, Germanica, and Kochii. But visits to real iris enthusiasts from Indiana to Massachusetts and Quebec showed the tremendous advances both in individual varieties and in their beautiful use in garden pictures.

In the following notes I have pretty well restricted myself to comment on American seedlings, for my visits were largely to American breeders. I don't believe I have a national or continental prejudice in my attitude towards new varieties—I made notes of and secured many foreign introductions this year—but commercial considerations have undoubtedly favored publicity for the imported as against the native novelties. I have hardly mentioned any but bearded irises, though I saw and enjoyed others, notably the swampy fields of *I. versicolor* near Hingham and along the north shore of the St. Lawrence River.

I was fortunate to find right in Ann Arbor itself a correspondent and real iris enthusiast in Mr. Sam Burchfield. On his tall bearded seedlings I can make little comment, as I was away when they flowered, but I saw his collection of dwarf bearded irises, a very large one, as this is his specialty, and I had a chance to estimate the value of his own numerous seedlings in this class. Their earliness and their use for rather casual rock gardeners like myself should make them of some interest. I selected for my own garden Endymion and Judy, lovely dark ruby selfs; Sonny, the best yellow I have seen; Harbor Lights, a lemon yellow of more spreading shape; and Silver Elf, a lovely little white, slightly marked by blue lines on the falls. Quaint, a squalens colored dwarf, his own favorite, had suffered some accident, and did not flower. I rejoice that he and also Professor E. O. James, of Oakland, California, are working to a wider range of colors in this desirable group.

At the Columbus (Ohio) Show, where with Mrs. Douglas Pattison I acted as judge, no seedlings were certificated. Mrs. J. C. Arbuckle showed a very nice violet blue seedling of pallida type which she proposes to call Charles Lindbergh. As shown, we did not rate it other than a pleasant garden flower, though Mr. F. B. Mead, who has grown it, waxes enthusiastic over its pure color. Golden Promise (Neeley) looked fine in one exhibit, but rather ordinary in several others. It is a good sized yellow self with

some veins in the falls, and is not needed by those who have Amber or Primrose, let us say.

About a hundred and fifty miles southwest of Ann Arbor there are three towns, about twenty-five miles apart from each other, and each with an interest for the iris grower. First we visited Van Wert, Ohio, spending an hour in the spacious and attractive flower garden Mr. Wassenberg has made while keeping wide lawns and tall trees. I was attracted by some new Siberian irises just flowering from seed and still unselected. In the same town Mr. Lee R. Bonnewitz is, as everybody knows, developing large plantings of irises for commercial purposes, almost exclusively European varieties as far as novelties are concerned. In a tent which he uses for exhibition purposes I did find a few of the late Mr. Mohr's seedlings, among them Coronado, which I was pleased to see visitors noticed at once because of its large size and lovely coloring along Asia lines. One of the objects of my journeying was to see if there were real grounds for the common statement that California derivatives from *mesopotamica* were poor growers in the middle west and along the Atlantic coast. As I had suspected, I found poor drainage and not cold to be the real trouble. Even first generation seedlings were doing well, as evidenced by fine plants of Azulado at Fort Wayne, where Mr. Mead thought it "magnificent," and near Boston, where I saw a lovely clump of it several years old. Santa Barbara and others of questioned hardiness were found doing well, the chief exception being Marian Mohr, which carries tenderness from Miss Willmott as well as from Carthusian. Mrs. Hires writes me that in her garden near Philadelphia the Californians are given no special attention and give no trouble.

Mr. Franklin B. Mead, at Fort Wayne, Indiana, has gathered together practically all the best, and he grows them both beautifully and well. Unlike the commercial dealer, he has not had to consider rapidity of increase, and his well-established clumps, carefully arranged in relation to each other and to his other flowers, present not only a glorious picture, but the best opportunity to see in one place the range of present-day irises. Of the novelties of American origin I was most struck by Mary Barnett, raised by Mrs. M. A. Cumbler, Highspire, Pennsylvania. Its published description as a glorified pallida dalmatica is quite correct, the improvement being largely due to a brilliant golden beard. Free flowering and vigorous, it is a real addition, one I felt I must make to my garden.

Mr. Mead has a set of the seedlings introduced by Mr. Jacob Sass, of Omaha, Nebraska, and I sought them out at once to see if they were as good as reported. The most distinct are a series of plicatas of Mme. Chobaut type but larger, better formed, with frilled standards and a wider range of coloring. Mr. Sass tells me they are derived in part from Her Majesty, a fact which accounts for their failure to do much in California, where that parent is weak. This is doubtless responsible also for their hardly growing much over two and a half feet, even in the most favorable situations. But they are new and different and make lovely low clumps. My first choice was King Karl, a flower of fine substance, the apricot standards dotted pink and brownish red, the ivory falls edged with maroon dots. Jubilee has peach-tinted standards and paler falls, the latter peppered on the edges a deep apricot pink. Lona is soft buff sanded with amethyst purple which deepens toward the edges. Beau Ideal has a white ground, standards and falls both margined a solid purple. The older Mid West is practically a brighter and better Parisiana with ruffled standards. Caroline E. Stringer, from the same source, is in effect a very pale pink on a white ground, a medium sized flower of good substance, on two and a half foot stems. Crossed with *trojana* it has given a seedling, not introduced, of practically the same color but larger size and taller growth. Prairie Gold, the Sass contribution to the yellow group, seemed no improvement on Miss Sturtevant's later yellows, though perhaps it is better under Nebraska conditions. Just before we left Mr. Mead's he showed me his own seedling, King Midas, which came from Dejazet × Lent A. Williamson. It is an iris I want, for, though not large by to-day's standards, its form and general style are fine and its coloring is soft and bewitching. Standards are a golden buff suffused garnet brown, falls velvety iridescent brown, the whole lit up by its golden center.

After a night at Fort Wayne we drove to Bluffton, the home of Mr. E. B. Williamson, arriving at 5 A. M. and finding him in his garden. Mr. Williamson lives twenty-four hours a day, and part of it is spent in raising iris seedlings. After raising Lent A. Williamson a discouraging period of poor returns followed, but now he seems to have reached his stride and to know where he is going. His 1927 introduction, Dolly Madison, I should call a great iris. In effect it is a much larger, pinker edition of Quaker Lady, a fine form, heavy substance, and tall stem. The flowers by actual meas-

urement with Mother of Pearl proved considerably larger. I heartily congratulate him on this descendant of Lent A. I thought Vesper Gold, though not at all such a stunning flower, quite distinct and tall, about three and a half feet. The medium sized flowers give the general impression of a dull pale gold, as there is some purple in the yellow tone. Compared with these two, other named varieties I saw left less impression, and I want to see George J. Tribolet again before I pass judgment on it. If Mr. Williamson felt it worthy of the description given I was ready to try it in California. Of unnamed seedlings or those not yet introduced, No. 295, a fine one of Mme. Durrand type but vigorous growth; 355, a deeper Isoline which I also triple starred; 452, a medium sized amoena, white and blue-purple, the best thing I have ever seen in its class; 380, a lovely variegata with very red falls; and Jane Williamson, a beautiful pinkish Quaker Lady of medium size, all carry promise of interesting future offerings. His old variegata No. 9, never named, has the darkest orange-yellow standards I have ever seen. Others I liked I shall not list, as, until introduced, this would be merely an aggravation. I only wish that Mr. Bonnewitz or some other commercial grower would free Mr. Williamson from the necessity of introducing his own seedlings. In a better world he would be subsidized for producing Dolly Madison alone.

In Mr. Williamson's garden I saw one delightfully colored seedling of medium size which he told me was Elsinore, raised by Mr. C. H. Hall, of Ingomar, Pennsylvania. It is a primrose yellow, more or less bordered rosy purple, not edged but flushed with the deeper color. I am catholic enough in my taste to want it, even if it doesn't hit one between the eyes.

A few days later I drove several hundred miles to Wellesley Farms, Massachusetts, to spend a couple of week-ends with my friend and correspondent of many years, Miss Grace Sturtevant. I just found her garden right, and it was worth all the distance traveled, and more. Besides her display and sample gardens, there were so many lovely combinations of irises with other plants that one might have studied the effects for days. The keying up of the iris plantings by lavish use of yellow varieties was especially to be noted as were the lovely combinations of irises with yellow roses, Hemerocallis and other plants. I saw in her Primrose a very real advance in better form and deeper yellow over her earlier Shekinah, and I prefer it to the better known Gold Imperial, even with its

still deeper color and fine finish. These, with Mr. Dykes's Amber, a flower in the same general class, seem to me to satisfy all need for yellow irises of the pallida type. These were justified, but all later yellows should be real advances in size, height, and depth of tone to warrant introduction. I have yet to find many such in the gardens I have visited.

Though she has raised some very large irises, Miss Sturtevant's standards of beauty are independent of size and are conditioned rather by color, form, and especially by proper proportion and balance. It is well this is so, for otherwise we should not have had her lovely blends of Shekinah size and growth which make such satisfying garden clumps. Of the newer ones, I fell in love with Endymion, an Afterflow seedling of warm buff with a flush of lilac which gives a new color scheme; with the amber colored Autumn Glow, and with Cameo, a bicolor blend of apricot and cream with pink tinted falls.

The high opinion I formed of Rialgar in my own California garden was justified in the clump I saw in its birthplace. Though only about two feet high, its rather large well-formed flowers with chrome yellow standards and falls flushed hellebore red seemed to put it at the head of all variegatas. If I could have only one it would be Rialgar. Another flower of variegata, or perhaps rather of squalens coloring, is Miss Sturtevant's new Camelliard, a really big bloom of Caterina habit and height, with amber yellow standards, orange beard, and falls flushed wine purple. I coveted it for breeding, as I had coveted Valkyrie years ago. Two other novelties caught my eye—Garnet, a tall, thin-stemmed flower of darker Archeveque coloring, just because it made such a nice garden picture; and Day Dream for its really beautiful blend of pink and yellow, the latter at the center of the flower. This is a tall bicolor of large size and good branching, not at all like the smaller blends I have mentioned. The only reason I didn't order it was that it was sold out for the season. I shall watch for its return to her list —a catalogue I am always impatient to see anew each year. Her next one will probably offer an interesting white and perhaps a blend or two from a fortunate cross made by her English assistant, Miss Violet Edlman, some few years ago.

As Miss Sturtevant has a fine selection of the best of other growers, I can add a word or two on other American seedlings in her garden. Passing over the distinct Sass plicatas all doing well

here, I noted several old gold flowers of rather dwarf stature. As Jacob Sass has a series of these he will doubtlessly select one or more quite different from the flowers of this color already introduced, namely, Valencia (W. Mohr) and Vesper Gold (Williamson). Candlelight, raised by Mr. D. M. Andrews, of Boulder, Colorado, is a cross of Caterina and Aurea, the old variegata. The result is a tall, upstanding plant of Caterina growth with a beautiful large flower of Afterglow coloring. It is both desirable in itself and of interest to the seekers of parents for future yellows. Elsa and Horizon are two lovely tall lavenders raised by Mr. B. Y. Morrison, of Washington, D. C. His new white, Sophronia, from Kashmir White and *trojana,* is a good deal like its white parent, with flaring falls and heavy substance. It will be in demand chiefly where its superior vigor and resistant qualities give it preference over other large whites. It is altogether smoother than Micheline Charraire and Argentina, which have so much in common. The newer whites from California, Purissima and Shasta, were not yet in eastern gardens, and my comments do not cover what I saw at home two seasons ago. At Miss Sturtevant's I did see in glorious flower the new plicata, San Francisco, which is in the second generation from *mesopotamica,* retaining its size and apparently quite hardy.

On my way back to Ann Arbor I spent a few days in Montreal where, through the kindness of Mr. R. Jackson Hopper, I saw what a beautiful small garden of irises and other perennials is possible where winters are really severe. Besides showing me his own garden, Mr. Hopper was my guide to that of Mr. F. Cleveland Morgan, near Montreal, where I saw rock plants better and more beautifully grown than it had ever been my fortune to see before in America. Of Mr. Morgan's iris seedlings I was most thrilled by a tall dark Siberian he had raised from the old Nigrescens, which seemed to me a great advance in getting deep, rich color and height. It is called Caesar. Mount Royal, which I am trying out in California, is a grand purple, not new in coloring but of fine quality. I was perhaps even more drawn to a series of pinks of taller, larger, greatly glorified Her Majesty type, rather than of Dream or Susan Bliss class. The best one of these had been tentatively named Hochelaga, after the Indian village which was found on the site of Montreal, but after having heard Americans try to pronounce it, I hope Mr. Morgan will select something equally appropriate but easier.

Of the introductions of English and French growers I shall mention only a very few outstanding ones, which I decided I wanted for my garden. The late Dominion derivative which Mr. Bliss has named in honor of Miss Grace Sturtevant I absolutely had to have, though I don't often pay forty dollars for an iris. It is large, of wonderful substance, and in effect a rich brown-red with orange beard and very dark falls. It is perfectly distinct and a real advance in breeding. Conchobar, Romola, Glamour, and Majestic were other admirable descendants of Dominion, which I saw, but they mark no such advance as Miss Grace Sturtevant. Mr. Bliss's Evadne is a nice new thing in the golden and rose tones. W. F. Dykes did not flower in America last season, but I thought Moonlight, in cream, and Amber, in yellow, desirable seedlings from our late iris authority, though the latter is not large.

It is hard to carry off many definite impressions from the dozens of seedlings introduced by Mr. Perry. Perhaps his best additions were in the apricot and red bicolor class. Of these, Mrs. H. F. Bowles is the best color, George Yeld the most floriferous and satisfactory garden plant, and Lord Lambourne the largest in size. Mary Gibson is a nice color, a blend of Quaker Lady type, with a stem too tall to be so little branched. Williamson's Dolly Madison is far better. Marian Cran, with its tall, thin stem, is a much advertised pink that I can do without. But I did like some of Perry's lavender blends, and added Harpalion to my list.

Germaine Perthuis will certainly carry on the fame M. Millet first gained with Mme. Gaudichau. I consider Souvenir de Loetitia Michaud, in blue lavender, and Mlle. Cecile Bouscant, in a more pinkish tone, desirable additions to a first class collection. Micheline Charraire left me cold. It is a tall, large white, very much like Argentina, perhaps a bit better, but I expect both to be quite superseded—a view shared by others.

I was also less excited by the Cayeux seedlings than I had hoped. Eclaireur, La Grande Ferre, Solferino, and Marquisette stood out as different, to me pretty rather than remarkable. I did not see Labor or Ophelia.

Now I am back in Berkeley, with the prospects of another season only two months away, and as I did not see my own garden last spring I am looking forward to the first flowering of two crops of seedlings.

SCIENCE SERIES NO. 2

Report of 1927 Iris Breeding Experiments at the New York Botanical Garden*

Clyde Chandler and A. B. Stout

The breeding work done during 1927 was confined largely to the Apogon or Beardless irises which bloomed during June. However, a few crosses were made with irises of earlier blooming such as *I. cristata, I. tectorum* and I. Curiosity (a dwarf bearded variety). Special efforts were also made to make crosses with the Japanese Irises, which are all of late blooming habit. The chief task attempted was to cross *Iris fulva* (a species of the foliosa group) of a bright copper-red color with some of the northern species (mostly of the sibirica, spuria, and laevigata groups) in the hope of producing plants with the fulva coloring which would be hardy in the more northern sections.

The methods used were the same as those used in 1925 and 1926. They are fully explained in the Bulletins containing the reports of the previous work done by Louise A. Cover, Marjorie R. Swabey, and Clarence E. Moore. The work was mostly done at The New York Botanical Garden display beds where it was impracticable to bag the flowers. Each flower pollinated was emasculated on the preceding day by removing all falls and standards while the flower was still in the bud. This process greatly reduced the chances for insect pollination. However, there still remained some chance for error. It was possible to control by bagging flowers certain of the pollinations made on plants growing in the Test Garden and the propagating house and these include some of the most important crosses.

Only viable pollen was used for the pollinations. The viability was determined by laboratory tests. The pollen was placed on an artificial medium made up of 1 gram agar agar and 5, 10, or 15 grams of cane sugar (depending upon the percentage of sugar desired) dissolved in 100 c.c. of distilled water. This culture was

* This work was made possible by the scholarship granted by The American Iris Society and was conducted under the joint cooperation of this society and The New York Botanical Garden.

It is a pleasure to express our appreciation of the assistance given us by Mrs. E. A. S. Peckham and Mr. John C. Wister.

then placed in a moist chamber and left from 12–24 hours. At the end of this time the pollen grains were examined and the percentage of germination recorded. The viability of the pollen and its ability to function in seed production has been classified as follows:

a. Pollen excellent; anthers well-formed, dehiscing properly, pollen abundant, high percentage of germination on artificial medium, resulting frequently in seed pods in controlled pollinations.

b. Pollen good; anthers well formed, dehiscing properly, pollen abundant, fair percentage of germination in culture tests, occasionally resulting in good seeds in controlled pollinations.

c. Pollen appearing good, anthers well formed, dehiscing properly, pollen abundant but when grown in culture tests shows little or no germination, but apparently able at times to produce seeds.

d. Pollen scant or none, anthers not well formed, if pollen is present it is "caked" and the anthers do not dehisce.

In respect to the ability to produce fruit and seeds when properly pollinated with good pollen, varieties are classed as follows:

A. Highly fruitful.

Will produce fruit to good pollen ("a" and "b" pollen), with usually a high percentage of successes.

B. Feebly fruitful.

Will produce fruit but usually to "a" pollen and with a low percentage of successes.

C. Entirely fruitless.

No seeds apparently will be obtained to crosses made with any pollen.

The results are here tabulated somewhat differently than in the previous reports. The results were checked during the first two weeks in July after the majority of the pollinations were made. The number of pods which were developing at that time and which seemed to contain seeds is recorded in the fourth column of the following table. Later the ripe pods were collected and the number which contained mature seeds are checked with a "+." Thus the numbers followed by a "+" indicate the number of ripened capsules collected. Another column has been added in which the relative number of seeds collected is designated as follows: "few

seeds", 1–25; "many seeds", 25–100; and "numerous", over 100.

In the following table species names are in italics. The names of clonal varieties are in ordinary type with the species or class to which the variety belongs indicated in parenthesis.

Table of Crosses and Results

Seed parent x pollen parent	Classes to which varieties belong: Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
australis x *fulva*	C	a	7		
x *Pseudacorus*	C	a	1		
x *laevigata*	C	a	3		
x 56642	C	a	3		
Baxteri (56119) (Sibirica)					
x *fulva*	A	a	6		
x *brachycarpa*	A	c	3		
x Emperor (Sibirica)	A	a	3	2+	many
x *orientalis* (Sibirica)	A	a	2	2+	many
Baxteri (51602) (Sibirica)					
x *fulva*	A	a	6		
x *Pseudacorus*	A	a	4		
x Emperor (Sibirica)	A	a	2		
x *versicolor*	A	a	3	3+	numerous
x *virginica*	A	a	3		
x *laevigata*	A	a	3	3+	many
x 56642	A	a	3		
Blue King (Sib) x *fulva*	A	a	1	1+	few
brachycarpa x *fulva*	A	a	6	1	
x True Blue (Sibirica)	A	b	1		
x *Pseudacorus*	A	a	5	1	
x *versicolor*	A	a	5	1+	few
caroliniana x selfed	A	a	2	2+	many
x *fulva*	A	a	4	1	
x *foliosa*	A	a	5		
x *laevigata*	A	a	2	2+	few
x Mrs. Tait (Spuria)	A	c	3		
x 56646	A	a	2	2	
chrysographes x selfed	A	a	2	2+	many
x *versicolor* 52018	A	a	6		
x 52349	A	a	3		
x *hexagona*	A	a	1		
cristata (50816) x *fulva*	B	a	5	died	
x *kimballiae*	B		1	died	
x *miraculosa*	B	b	1		
x *savannarum*	B	b	1		
cristata (50817) x *fulva*	B	A	2		
x *kimballiae*	B		3		

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong: Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
cristata 52002 x selfed	B	a	2	1+,	1 died, few
x *fulva*	B	a	2		
x *kimballiae*	B		1		
x Spanish Iris (?)	B	c	4		
x *viola purpurea*	B	a	1		
x *miraculosa*	B	b	1		
cristata 52357 x *fulva*	B	a	1		
" 52252 x selfed	B	b	3	3+	few
x *fulva*	B	a	1		
Curiosity x *fulva*	B	a	1	died	
delavayi x selfed	A	c	1	1	
x *Pseudacorus*	A	a	2	2	
x *foliosa*	A	a	6	6	
x *fulva*	A	a	4	4	
x Blue King	A	a	1	1	
x *carolina*	A	a	2		
x Juno (Spuria)	A	?	1		
x Dorothea K. Williamson	A	a	2		
x *laevigata albopurpurea*	A	a	2		
x 56646	A	a	2		
Dorothea K. Williamson (Hexagona) x *Baxteri* (Sibirica)	A	a	2	1	
x *foliosa*	A	a	5	2+	many
x *fulva*	A	a	3	2+	many
x *laevigata*	A	a	3	1	
x *versicolor*	A	a	9	3	
x *laevigata albopurpurea*	A	a	3	1	
x *Pseudacorus*	A	a	3		
x 56646	A	a	3	2, 1+	few, wrinkled
x *carolina*	A	a	5	3	
x Mrs. Tait (Spuria)	A	c	3	2	
x *delavayi*	A	c	3	1	
x Lord Woolsey (Spuria)	A	b	2	1	
x Du. Kinderen (Bulbous Dutch)	A	a	2		
x Blue King	A	a	3	1	
x Juno (Spuria)	A	?	1	1	
Emperor (Sibirica) x *Pseudacorus*	A	a	3	1+	few
x *fulva*	A	a	3		
x *versicolor*	A	a	4	3, 1+	few
x *laevigata*	A	a	3	1	
x *virginica* 53039	A	a	3	2	
x *brachycarpa*	A	c	4		
x Tol-Long	A	b	3		
x 164a	A	a	7	6+	numerous
x 56642	A	a	3		
x *orientalis*	A	a	2	2+	numerous

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong		No. of flowers pollinated	Results	Relative number of seeds
	Seed parent	Pollen parent			
foliosa x selfed	A	a	1	1	
x Mrs. Tait (Spuria)	A	c	4		
x *fulva*	A	a	7	3+	many
x *Pseudacorus*	A	a	6	2	
x *delavayi*	A	c	2		
x Du Kinderen	A	a	2	2	
x Lord Woolsey (Spuria)	A	b	1		
x *carolina*	A	a	3	2	
x 56642	A	a	4	2	
x *laevigata*	A	a	2	1	
x *laevigata albopurpurea*	A	a	3	1+	few
x 56646	A	a	2	1	
x Dorothea K. Williamson	A	a	2	1+	many
fulva x selfed	A	a	3	3+	few, very large
x 56642	A	a	6	1+	few
x 56646	A	a	4	1+	few
x *laevigata*	A	a	4		
x Mrs. Tait (Spuria)	A	c	4	1	
x *laevigata albopurpurea*	A	a	2		
x *Pseudacorus*	A	a	3		
x *carolina*	A	a	3	1	
x *delavayi*	A	c	2		
x Lord Woolsey (Spuria)	A	b	1		
x *foliosa*	A	a	1		
x Dorothea K. Williamson	A	a	1		
x *versicolor*	A	a	8		
x 54814	A	a	1		
x *virginica purpurescens*	A	a	1		
x *virginica* 53039	A	a	2		
x Mme. Butterfly (Sibirica)	A	c	1		
x Tol-Long	A	b	1		
x Emperor (Sibirica)	A	a	4	1	
x *brachycarpa*	A	c	3		
x 56638	A	?	2		
x Baxteri	A	a	1		
x True Blue (Sibirica)	A	a	1		
x 164a	A	a	5		
x 56566	A	a	1		
x *tricuspis*	A	b	1		
gracilipes x *tectorum*	A	a	3		
graminea x *siberica*	A	a	1		
x *fulva*	A	a	2		
x *versicolor*	A	a	3		
x *Pseudacorus*	A	a	1		
Hookeri x *fulva*	A	a	3		
x *tricuspis*	A	b	3	1+	many

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong: Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
Imperial (dwarf bearded)					
x selfed	A	a	3	3+	numerous
x *fulva*	A	a	12		
x *versicolor*	A	a	5		
x 56646	A	a	1		
kamsoniensis x *graminea*	A	b	1		
lactea (Sibirica) x *fulva*	A	a	11		
x *versicolor*	A	a	4		
x *versicolor* 56728	A	a	4	1	
x *graminea*	A	b	2		
x *brachycarpa*	A	c	10		
x Emperor (Sibirica)	A	a	6		
x *virginica* 53039	A	a	3		
Lady Northcliffe x *graminea*	A	b	1		
(53908) x *fulva*	A	a	2		
x Emperor (Sibirica)	A	a	3		
x *versicolor*	A	a	2	1+	many
x *brachycarpa*	A	c	2		
x *orientalis*	A	a	2	2+	numerous
laevigata x selfed	A	a	1	1+	many
x *fulva*	A	a	2	2	
laevigata albopurpurea					
x selfed	A	a	2	2+	many
x *versicolor*	A	a	3		
x Lord Woolsey (Spuria)	A	b	1		
x *fulva*	A	a	1		
x 56642	A	a	1		
x Dorothea K. Williamson	A	a	1	1	
lilacina 48229 (Spuria)					
x *spuria*	A	?	2	1+	few
x *fulva*	A	a	4		
x *laevigata*	A	a	3		
x *Hookeri*	A	a	4		
x *Pseudacorus*	A	a	4		
x *versicolor*	A	a	4		
x *virginica* 53039	A	b	4	1+	few
x *tricuspis*	A	b	4		
x *brachycarpa*	A	c	3		
x 56642	A	a	3		
x 164a	A	a	3	2+	few
x *orientalis*	A	a	3	2+	few
x *graminea*	A	b	2		
Lord Woolsey (Spuria)					
x *fulva*	B	a	1	1	
x Blue King	B	a	1	1	
x Dorothea K. Williamson	B	a	1	1	

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong		No. of flowers pollinated	Results	Relative number of seeds
	Seed parent	Pollen parent			
Mme. Butterfly (Sibirica)					
x *graminea*	A	b	2		
x *laevigata*	A	a	3		
x *spuria*	A	?	1		
x *Hookeri*	A	a	3		
x *fulva*	A	a	5		
x *lactea*	A	a	3		
x *Pseudacorus*	A	a	4		
x *virginica* 54122	A	a	4		
x *versicolor*	A	a	4	2+	few
x Emperor (Sibirica)	A	a	5	3+	many
orientalis x *fulva*	A	a	2		
x *brachycarpa*	A	c	3		
x 56642	A	a	3	2	
Polakii x *fulva*	A	a	3		
x *virginica purpurescens*	A	a	3	1	
x *Pseudacorus*	A	a	3		
x *versicolor*	A	a	4	2, 1+	few?
x *laevigata*	A	a	2	1	
x *brachycarpa*	A	c	4		
x *virginica*	A	a	3		
x Emperor	A	a	4		
prismatica x selfed	A	a	3	3+	few
x *fulva*	A	a	10	4	
x *foliosa*	A	a	7	5, 1+	few?
x 56646	A	a	4	2	
x 56642	A	a	9	3	
x *laevigata*	A	a	7	5, 1+	few?
x Baxteri (Sibirica)	A	a	3	1	
x *caroliniana*	A	a	2	1	
x *delavayi*	A	c	2		
x Lord Woolsey	A	b	2		
x 54814	A	a	1		
x *brachycarpa*	A	c	5	1	
x 164a	A	a	5	2	
Pseudacorus x selfed	A	a	1	1+	numerous
x *graminea*	A	b	1		
x *fulva*	A	a	24		
x *virginica* 54122	A	a	7	4	
x *virginica purpurescens*	A	a	2	2	
x *Hookeri*	A	a	4		
x *tricuspis*	A	b	4	1	
x *versicolor* 56728	A	a	4	4	
x 53038	A	a	4	2, 1+	few
x *versicolor*	A	a	3	1	
x 54814	A	a	4	1	
x Mme. Butterfly	A	c	4	1	

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
x *brachycarpa*	A	c	6	1+	few
x True Blue (Sibirica)	A	b	2	1	
x Emperor (Sibirica)	A	a	2		
x 164a	A	a	5		
x 56642	A	a	5		
x *laevigata albopurpurea*	A	a	1		
x *foliosa*	A	a	2		
x *prismatica*	A	a	4		
Pseudacorus bastardi x *fulva*	A	a	5	1+	many
x *versicolor*	A	a	4	4, 1+	few
x Emperor (Sibirica)	A	a	2		
x *brachycarpa*	A	c	4	2	
x *virginica* 53039	A	a	4	1+	numerous
savannarum (?) x *foliosa*	A	a	2		
x Dorothea K. Williamson	A	a	2		
x *fulva*	A	a	1		
Sibirica x *sogdiana*	A	c	4		
x *graminea*	A	b	4		
x *laevigata*	A	a	4		
x *fulva*	A	a	8	1	
x 54814	A	a	4	4	
x *versicolor*	A	b	4		
x *Pseudacorus*	A	a	4	4, 1+	many
x *virginica purpurescens*	A	a	4	2	
x 54122	A	a	4	4+	many
x *virginica* 53039	A	a	4		
x 56642	A	a	3		
x 164a	A	a	3	1+	many
sibirica acuta x *fulva*	C	a	4		
x *Pseudacorus*	C	a	2		
x *virginica*	C	a	1		
sibirica alba x *Hookeri*	A	a	7	2, 1+	few
x *tectorum*	A	a	4		
x *graminea*	A	b	4		
x *laevigata*	A	a	4	1+	many
x 54814	A	a	4	2, 1+	few
x *fulva*	A	a	8		
x *versicolor*	A	a	5	2+	few
x *Pseudacorus*	A	a	4	3, 1+	few
x *virginica* 54122	A	a	4	2+	few?
x *virginica purpurescens*	A	a	4		
sogdiana x *tricuspis* 53554	A	b	2		
x *graminea*	A	b	1		

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong: Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
spuria Juno x *fulva*	only one flower		1	broke off	
spuria Mrs. Tait x selfed	B	c	1	1	
x *fulva*	B	a	5	4, 1+	few?
x *foliosa*	B	a	2	2	
x Dorothea K. Williamson	B	a	1	1	
x 56642	B	a	1	1	
x *delavayi*	B	c	2	2	
spuria 48930 x selfed	A	?	3	1+	few
x *graminea*	A	b	2		
x *laevigata*	A	a	2		
x *Hookeri*	A	a	2		
x *versicolor*	A	a	4	3+	many?
x *Pseudacorus*	A	a	4	1+	few
x *virginica* 53030	A	a	4		
x *tricuspis*	A	b	4		
x *fulva*	A	a	12	2+	few
x True Blue (Sibirica)	A	b	5	4, 3+	numerous
x *brachycarpa*	A	c	5	1+	few
x *Baxteri* (Sibirica)	A	a	5	2+	many
x 164a	A	a	5	4, 2+	numerous
x 56642	B	a	4	1	
x *orientalis*	A	a	2	2+	numerous
Sunny Brook (Sib.) x *fulva*	A	a	5	1	
x *Pseudacorus*	A	a	2		
x Emperor	A	a	5		
x *versicolor*	A	a	4	3, 1+	molded
x *laevigata*	A	a	3	3, 2+	many
x *orientalis*	A	a	3	2+	numerous
x 164a	A	a	2	2, 1+	many
tectorum x selfed	B	a	1	1	
x *cristata*	B	a	1		
x *fulva*	B	a	4		
Tol-Long x selfed	A	a	1	1	
x *graminea*	A	b	2		
x *fulva*	A	a	4		
tricuspis x *fulva*	A	a	5	2	
x *Hookeri*	A	a	3	2+	many
x *versicolor*	A	a	3	1	
x *Pseudacorus*	A	a	3	1	
x *laevigata*	A	a	3		
x 56642	A	a	3		
tripetala x selfed	A	a	1	1+	many
x *hexagona*	A	a	1		
x *versicolor*	A	a	1		

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong: Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
True Blue x *graminea*	A	b	1	1	
x *fulva*	A	a	5		
x Emperor (Sibirica)	A	a	4	3, 2+	numerous
x *Pseudacorus*	A	a	2	2+	many
x *brachycarpa*	A	c	4	1+	many
x *versicolor*	A	a	4	2+	few?
x 56642	A	a	3		
x 164a	A	a	2	1+	many
x *orientalis*	A	a	1	1+	many
virginica (54122) x *Pseudacorus*	A	a	1	1+	many
x *fulva*	A	a	3	1+	few
virginica x selfed	A	a	1	1+	few
x *fulva*	A	a	13	2, 1+	many
x 56733	A	a	2	2, 1+	many
x 54814	A	a	9	2+	many
x *laevigata*	A	a	8	4+	few
x *Pseudacorus*	A	a	2		
x Emperor (Sibirica)	A	a	3		
x *brachycarpa*	A	c	5		
x *graminea*	A	b	4		
x True Blue (Sibirica)	A	b	4		
x Tol-Long	A	b	4	1+	many
x *Baxteri* (Sibirica)	A	a	5		
x *versicolor*	A	a	5	5+	numerous
x *orientalis*	A	a	5		
x 56642	A	a	5		
x *prismatica*	A	a	2		
x *foliosa*	A	a	2		
x *laevigata albopurpurea*	A	a	2		
virginica purpurescens x *fulva*	A	a	3		
x *fulva*	A	a	3		
x *brachycarpa*	A	c	3		
x *versicolor*	A	a	2	2, 1+	few
x *laevigata*	A	a	1	1+	many
x *orientalis*	A	a	4		
" x 56642	A	a	4		
(53040) x 54814	A	a	1	1+	many
x *laevigata*	A	a	1		
x *graminea*	A	b	1		
x 56638	A	a	1		
x *fulva*	A	a	6		
versicolor (52016) x selfed	A	a	2	2	
x *foliosa*	A	a	2		
x *laevigata*	A	a	2	2	
x *prismatica*	A	a	2		
x *delavayi*	A	c	2	1	
x *hexagona*	A	a	2		

Table of Crosses and Results—(Continued)

Seed parent x pollen parent			Classes to which varieties belong		No. of flowers pollinated	Results	Relative number of seeds
			Seed parent	Pollen parent			
		x *caroliniana*	A	a	2	1	
		x 56646	A	a	2	2	
		x Lord Woolsey	A	b	2		
		x Du Kinderen (Bulbous-Dutch)	A	a	2		
		x 56642	A	a	2		
"	(52045)	x selfed	A	a	2	2+	many
		x *fulva*	A	a	5		
		x *prismatica*	A	a	2		
		x *laevigata albo-purpurea*	A	a	5	1+	few
		x 56642	A	a	5	2	
"		x *Pseudacorus*	A	a	5		
"	(52145)	x *fulva*	A	a	6		
"	(52154)	x *fulva*	A	a	3		
		x *foliosa*	A	a	2		
		x 56646	A	a	2	2, 1+	few
		x *Pseudacorus*	A	a	4		
		x *laevigata albo-purpurea*	A	a	3		
"	(52348)	x *fulva*	B	a	2		
"	(52364)	x selfed	A	a	2	2	
		x *laevigata albo-purpurea*	A	a	2		
		x *foliosa*	A	a	2	1+	few
		x 56646	A	a	2	2	
		x *fulva*	A	a	9	3, 1+	few
		x *Pseudacorus*	A	a	5		
		x Mrs. Tait (Spuria)	A	c	6		
		x Du Kinderen	A	a	6	3	
		x *delavayi*	A	c	4		
		x *caroliniana*	A	a	4	3+	many
versicolor	(52364)	x *Pseudacorus*	A	a	4		
		x *laevigata albo-purpurea*	A	a	4		
		x *fulva*	A	a	9	3, 1+	few
		x *foliosa*	A	a	4		
		x *Baxteri*	A	a	2		
"		x *spuria*	A	?	4		
	(52368)	x *fulva*	B	a	2		
		x *foliosa*	B	a	2		
		x 56646	B	a	2		
		x *Pseudacorus*	B	a	4	1+	few
		x Dorothea K. Williamson	B	a	4		
		x Mrs. Tait (Spuria)	B	c	4		

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong		No. of flowers pollinated	Results	Relative number of seeds
	Seed parent	Pollen parent			
x *delavayi*	B	c	3		
x *caroliniana*	B	a	3	1	
x Lord Woolsey (Spuria)	B	b	5		
x 56641 (pale maroon color)	B	a	3		
versicolor (52369) x *fulva*	B	a	4		
x 56646	B	a	2		
x *delavayi*	B	c	2		
x *foliosa*	B	a	2		
" (52376) x *fulva*	B	a	4		
x *foliosa*	B	a	4		
x Lord Woolsey (Spuria)	B	b	2		
" (52383) x selfed	A	a	1	1+	few
x *fulva*	A	a	4		
x 56642	A	a	4		
x Lord Woolsey (Spuria)	A	b	2		
x *foliosa*	A	a	2		
" (52384) x *fulva*	B	a	6		
x 56646	A	a	2		
x *carolina*	B	a	2	2+	many
x *delavayi*	B	c	2		
x D. K. Williamson	B	a	2		
x Lord Woolsey	B	b	2		
x *foliosa*	B	a	3		
x Du Kinderen	B	a	3		
" (52414) x selfed	A	a	3	3+	many
x 56642	A	a	4		
x *fulva*	A	a	5		
x 164a	A	a	1	1+	many
x *foliosa*	A	a	3		
x Du Kinderen	A	a	4		
x *Pseudacorus*	A	a	4	1+	few
x *spuria* Mrs. Tait	A	c	4		
x *caroliniana*	A	a	3	1+	few
x Dorothea K. Williamson	A	a	3		
x Lord Woolsey (Spuria)	A	b	3		
x *spuria* Juno	A	?	3		
x *laevigata albopurpurea*	A	a	3		
x 56641 (pale maroon color)	A	a	3		
" (53037) x *laevigata*	A	a	1		

Table of Crosses and Results—(Continued)

Seed parent x pollen parent			Classes to which varieties belong		No. of flowers pollinated	Results	Relative number of seeds
			Seed parent	Pollen parent			
		x *graminea*	A	b	2		
		x *fulva*	A	a	4		
		x *virginica* 54122	A	a	4	1+	many
		x *Pseudacorus*	A	a	4		
		x *Hookeri*	A	a	1		
		x *tricuspis*	A	a	4	1	
		x *brachycarpa*	A	c	4		
		x Emperor (Sibirica)	A	a	4		
		x *Baxteri*	A	a	5		
"	(53483)	x *fulva*	A	a	3		
		x Lord Woolsey (Spuria)	A	b	2		
		x Blue King (Sibirica)	A	a	1		
"	(53843)	x *fulva*	A	a	6	2	
		x Emperor (Sibirica)	A	a	3	1+	many
		x *laevigata*	A	a	5	5+	few
"	(53885)	x *graminea*	A	b	2		
		x *fulva*	A	a	4		
		x *laevigata*	A	a	5	5, 3+	few
		x 56642	A	a	5	2, 1+	few
"	(54120)	x *fulva*	A	a	3		
"	(54814)	x selfed	A	a	1	1+	many
		x 53040 (*virginica purpurescens*)	A	a	1	1+	many
		x *graminea*	A	b	2		
		x *Pseudacorus*	A	a	4		
		x *fulva*	A	a	5	2, 1+	few
		x 56642	A	a	3		
		x *foliosa*	A	a	3		
		x *laevigata*	A	a	2		
		x Mrs. Tait (Spuria)	A	c	2		
		x *Baxteri* (Sibirica)	A	a	2		
		x *caroliniana*	A	a	3	1+	few
		x *delavayi*	A	c	3		
		x 164a	A	a	2		
		x Dorothea K. Williamson	A	a	2		
"	(55127)	x *fulva*	A	a	3		
		x *foliosa*	A	a	3		
"	(55471)	x *fulva*	A	a	5		
"	(55475)	x selfed	A	a	3	3, 1+	many
		x Emperor (Sibirica)	A	a	3		

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
x *fulva*	A	a	14		
x 164a	A	a	5	2	
x 56642	A	a	5		
" (56724) x *fulva*	B	a	3		
" (56727) x *fulva*	A	a	1	1+	few
x *Pseudacorus*	A	a	2		
x 164a	A	a	1		
" (56728) x *fulva*	A	a	1		
x 164a	A	a	1		
" (56730) x 164a	A	a	1		
x *laevigata*	A	a	2		
x 56642	A	a	5		
x *fulva*	A	a	1		
" (56731) x 56642	A	a	2		
" (56732) x *Baxteri* (Sibirica)	A	a	2	1+	many
" (56733) x *Baxteri* Sibirica)	A	a	2		
x *fulva*	A	a	2	1	
" (56734) x *fulva*	A	a	2	1	
" (56735) x *fulva*	A	a	1		
" (56736) x *virginica purpurescens*	A	a	4	1+	many
x *fulva*	A	a	1	1	
(56737) x *fulva*	A	a	4		
(56741) x *fulva*	A	a	8		
(56899) x *fulva*	A	a	1		
(56900) x *fulva*	A	a	2		
(56902) x *fulva*	A	a	2		
(56904) x *fulva*	A	a	1		
(56908) x *fulva*	A	a	1		
(56914) x *fulva*	A	a	2		
(56113) x *fulva*	A	a	1		
versicolor? x *fulva*	A	a	14	1+	few
x *Pseudacorus*	A	a	5	1	
x 164a	A	a	3	1+	many
x 56642	A	a	3		
x *virginica* 53039	A	a	4		
versicolor? x selfed	A	a	1	1+	many
x 56642	A	a	5	4+	many
x *fulva*	A	a	1	1	
x 56646	A	a	3	3, 2+	many
x *foliosa*	A	a	3		
x *laevigata*	A	a	3		
x *Pseudacorus*	A	a	2		
x Mrs. Tait (Spuria)	A	c	4		
x *Baxteri* (Sibirica)	A	a	3		

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
x *caroliniana*	A	a	2	2, 1+	few, very large seed
x *delavayi*	A	c	3		
x Dorothea K. Williamson	A	a	2	1	
(large variety) x *fulva*	B	a	7		
x 56646	B	a	4		
x *foliosa*	B	a	4		
versicolor (?) x *fulva*	A	a	5		
versicolor (?) x *fulva*	A	a	14		
x *Pseudacorus*	A	a	8	3+	few
x *virginica* 53039	A	a	4	4, 2+	few
x *tricuspis*	A	b	4	2	
x *virginica purpurescens*	A	a	4	2+	numerous
x *Hookeri*	A	a	3		
x *lactea*	A	a	4		
x Tol-Long	A	b	4		
x 56566	A	a	4	1+	many
x Mme. Butterfly	A	c	5		
x *virginica* 54122	A	a	5	5, 3+	numerous
x Emperor	A	a	2		
x 56646	A	a	4		
x *laevigata*	A	a	2		
x 56642	A	a	4		
x *brachycarpa*	A	c	4		
x True Blue (Sib.)	A	b	4		
x *Baxteri* (Sib.)	A	a	4		
x *graminea*	A	b	3		
x *orientalis*	A	a	6		
x *fulva*	B	a	4		
x *graminea*	B	b	5		
x *laevigata*	B	a	4		
x *Pseudacorus*	B	a	4	2	
x *virginica purpurescens*	B	a	3		
x *fulva*	B	a	3		
x *laevigata*	B	a	3		
x *Hookeri*	B	a	4		
x *virginica* 54122	B	a	4	1	
versicolor rosea x *fulva*	A	a	4		
x *brachycarpa*	A	c	6		
x 56646	A	a	4	1	
52081 x *fulva*	A	a	5		
x *foliosa*	A	a	6		
x *delavayi*	A	c	3		
x *laevigata albopurpurea*	A	a	3	2, 1+	many
x 56646	A	a	3		
x *caroliniana*	A	a	3		

Table of Crosses and Results—(Continued)

Seed parent x pollen parent	Classes to which varieties belong Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
x Dorothea K. Williamson	A	a	3		
x Lord Woolsey (Spuria)	A	b	3		
52384 x selfed	B	a	2	2	
x *fulva*	B	a	6		
x 56646	B	a	2		
x *delavayi*	B	c	2		
x Dorothea K. Williamson	B	a	2		
x Lord Woolsey (Spuria)	B	b	2		
x *foliosa*	B	a	3		
x Du Kinderen	B	a	3		
56566 x selfed	C	a	2	1+	1 died, few
x *fulva*	C	a	6		3 died
x 56642	C	a	2		
55127 x selfed	B	a	1		died
x *fulva*	B	a	1		
x 56642	B	a	1		
164a x *fulva*	A	a	1	1+	many
x *fulva*	A	a	2		
x 56642	A	a	3		
x *Pseudacorus*	A	a	4		
x *foliosa*	A	a	1		
56646 (albino) x 56642	A	a	1	1+	many
x *foliosa*	A	a	1	1	
x *fulva*	A	a	1	1	
55227 x *fulva*		a	1		
55226 x *fulva*		a	2		
55131 x *fulva*		a	2		
56642 x *fulva*	A	a	2	2+	many
x *foliosa*	A	a	1		
56638 x *fulva*	A	a	3		
56643 x *Pseudacorus*	A	a	1		
x 56646	A	a	1	1	
56622 x *laevigata*	A	a	2	1	
x *fulva*	A	a	2		
x *laevigata albopurpurea*	A	a	1		
x Dorothea K. Williamson	A	a	1	1+	few
x Mrs. Tait (Spuria)	A	c	1	1	
56641 x *fulva*	A	a	1	1+	few very large

Table of Crosses and Results—(Continued)

Seed parent x pollen parent		Classes to which varieties belong Seed parent	Pollen parent	No. of flowers pollinated	Results	Relative number of seeds
49878	x *sogdiana*	A	c	2		
	x *graminea*	A	b	2		
	x *virginica* 54122	A	a	3		
	x *Pseudacorus*	A	a	2		
	x *fulva*	A	a	8		
	x *versicolor*	A	a	5	3+	few
	x *laevigata*	A	a	2		
	x 56642	A	a	3		
	x 164a	A	a	4		

Summary of Results with Beardless Irises

A tabular summary of the various combinations in approximately 2000 cross-pollinations is as follows:

	Number of combinations	Successful combinations
Species x species	261	84
Species x varieties	52	6
Varieties x species	64	21
Varieties x varieties	18	3
	Total 395	Total 114

The results of crosses with *I. fulva* are of special interest. This species appears to be a better pollen parent than a seed parent. As a seed parent *I. fulva* gave good seed to the pollen of plants No. 56642 and No. 56646 both of which are plants from Louisiana.* The table of crosses and results shows that on this species the pollen of 21 different Irises (species and varieties) failed to give any development of capsules. In three (*I. spuria* Mrs. Tait; *I. carolina;* and *I.* Emperor) poor capsules without good seeds were ob-

* Nos. 56642, 56622, 56646, and 56641 are Irises native of Louisiana which have been brought to the N. Y. Botanical Garden by Dr. J. K. Small. Number 56646 is a large white Iris which has not yet been named. Number 56641 is labeled pale maroon but its identity is uncertain. Numbers 56642 and 56622 are large maroon-colored Irises which have recently been named *I. vinicolor.*

tained. As a seed parent in the crosses attempted *I. fulva* has given viable seed in only the two cases mentioned. As a pollen parent in crosses *I. fulva* yielded capsules with apparently viable seed on the following:—Blue King, 56642, 56641, *pseudacorus* bastardi, *spuria* 48930, *virginica, foliosa,* Dorothea K. Williamson, and *versicolor.* The latter will probably prove the most interesting of all the crosses since *I. versicolor* is a hardy northern species. Five capsules with seed were obtained from this cross.

The cross *I. foliosa* x *I. fulva* was successful, giving three capsules with seeds. A fine capsule was obtained from the cross *I. foliosa* x Dorothea K. Williamson. The latter is itself a hybrid between *I. foliosa* and *I. fulva. I. foliosa* x *I. laevigata albopurpurea* was also a successful cross.

The crosses Dorothea K. Williamson x *fulva* and Dorothea K. Williamson x *foliosa* which are only the back crosses on the parents of Dorothea K. Williamson were successful. Perhaps the results of crosses other than these with *I. fulva* may prove still more effective. Iris Dorothea K. Williamson x 56646 (a large white Iris from Louisiana which has not yet been named) and 56622 (a large maroon-colored Iris from Louisiana) x Dorothea K. Williamson produced fine capsules with good seed.

The greatest number of pollinations were made using *I. versicolor* as a seed parent but many were made using it as a pollen parent. *I. versicolor* is a native wild species of the northern sections and it was especially desired that it show cross with *I. fulva.* Fine capsules each containing few seeds which appear viable were the results of this cross. The successful combinations may be tabulated as follows:

Versicolor as a seed parent	*Versicolor* as a pollen parent
versicolor x *fulva*	*brachycarpa* x *versicolor*
" x *laevigata*	49878 x "
" x *laevigata albopurpurea*	Mme. Butterfly (Sibirica) x "
" x *foliosa*	Polakii (Sibirica) x "
" x *Pseudacorus*	*sibirica* alba (Sibirica) x "
" x *carolina*	Sunny Brook (Sibirica) x "
" x *caroliniana*	True Blue (Sibirica) x "
" x Emperor (Sibirica)	*virginica* x "
" x *virginica*	*virginica purpurescens* x "
" x *virginica purpurescens*	
" x 56642	
" x 56646	
" x 56566	
" x *Baxteri* (Sibirica)	

Successful results have been obtained from crosses between other species and varieties which may be noted by referring to the table of crosses and results.

Results with Japanese Beardless Irises

Attempts were made to cross the Japanese Irises with the earlier blooming Beardless Irises. Pollen of only four of the earlier bloomers was viable at the time when the Japanese Irises began to flower. The pollen of one of these four gave fine pods with crosses on two Japanese Irises (one species and one variety). These pollinations were not completely controlled. The flowers were emasculated on the day preceding the pollination but a slight chance still remained for cross-pollinations with other Japanese Irises. The table of results follows:

Crane's Feather	x ? (maroon and yellow)	A	4	4+	numerous
	x 48247	A	4	2+	many
	x ? (pink and yellow)	A	3		
Dancing Nymphs	x *chrysographes*	A	2	2+	numerous
	x *versicolor*	A	2		
	x *tripetala*	A	2		
Hodai 49599	x *chrysographes*	A	2	2+	many
	x *versicolor*	A	2		
	x 52349	A	2		

I. chrysographes is a later-blooming species of Iris than any of the others of the Sibirica group, hence its pollen was still viable when the Japanese Irises began to flower. As indicated in the table of results no tests were made of the viability of the pollen of the Japanese Irises. This was due to the fact that it was not to be used in any crosses with the earlier-blooming Beardless Irises. More attempts to cross the Japanese Irises with the earlier-blooming Beardless might give viable seed. This will be possible only by keeping the pollen of the early beardless viable until the Japanese Irises begin to flower or by forcing the latter into earlier bloom.

BIBLIOGRAPHY OF THE WRITINGS OF SIR MICHAEL FOSTER ON IRISES

Compiled by ETHEL ANSON S. PECKHAM

NOTE.—Volume number in bold type thus **54**: then page 102–103, and date 6 Aug. 1898. Illustrated*, in color**. It has been thought best to include the reviews.

Aitchisoni, Iris. The Gard. **54**: 102–103. 6 Aug 1898.**
Aschersoni, Iris. The Gard. **61**: 288. 3 May 1902.*
(Reviewed by E. T. C. in Jour. Roy. Hort. Soc. **27**: Pts 2 & 3, 763. Dec 1902.
Aurea, Iris. The Gard. **31**: 52–53. 15 Jan 1887.**
Bakeriana, Iris. Bot. Mag. **115**: tab. 7084. 1889.**
Bakeriana, Iris. Gard. Chron. **67**: 76. 18 Jan 1890.
Boissieri, Iris (Xiphion). Gard. Chron. **62**: 38. 9 July 1887.
bucharica, Iris. Gard. Chron. **93**: 251. 18 Ap 1903.
Bulbous Irises. Spottiswoode & Co., London. (Lecture deliv. 3 May 1892.) (Printed for Roy. Hort. Soc.) 1–86.*
(Reviewed Jour. Roy. Hort. Soc. **16**: Pt 1, 159. 1893.
caucasica and Iris orchioides, Iris. Gard. Chron. **65**: 588–590. 11 May 1889.
cengialti, Iris. Gard. Chron. **18**: 554. 1 May & concl. 586. 8 May 1886.
English Iris. The Gard. **31**: 212–213. 5 Mar 1887.**
Eulefeldi, Iris. Bot. Mag. **112**: tab. 6902. 1886.**
Ewbankiana, Iris. Gard. Chron. **89**: 397. 25 June 1901.*
Fringed Iris (Japonica), The. The Gard. **28**: 120. 1 Aug 1885.**
German Irises, The So-Called. The Gard. **28**: 508–510. 14 Nov 1885.
Hookeri and the Asian Iris Setosa, The Identity of Iris. Rhodora **5**: No. 5, 157–159. June 1903.
Irises. The Gard. **28**: 530. 21 Nov. 1885.
Irises. Gard Chron. **64**: 182. 18 Aug 1888.
Irises, A Group of. The Gard. **66**: 8–9. 2 July 1904.**
Irises, Notes on. Gard. Chron. **54**: 231. 25 Aug, 331. 15 Sep, 373. 22 Sep, 406. 29 Sep 1883.
Irises, On. Trans. Hort. Soc. **3rd Ser. 11**: 131–149. 1889 (Read 14 May 1887).
Irises, On. Jour. Roy. Hort. Soc. **11**: 3,131–149. Oct 1889.
Irises. (Request fr. M. Foster). Gard. Chron. **53**: 570. 5 May 1883.
Kashmiriana, Iris. The Gard. **44**: 591. 23 Dec 1893.
Korolkowi, Iris. The Gard. **28**: 484–485. 7 Nov. 1885.**
Korolkowi, Rgl., I. lineata, Foster und Iris Vaga, Foster, Bermerkungen ueber Iris. Gartenf. **36**: 201–205. & 672. 1887.
Leichtlini, Iris. Gard. Chron. **92**: 242. 4 Oct 1902.*
Letter from Sir Michael Foster to Sereno Watson 1890, A. A. I. S. Bull. 3: 5. June 1921.
Lorteti, (Barbey), Iris. Gard. Chron. **72**: 152. 6 Aug 1892.*
Lorteti, Iris. Gard. Chron. **72**: 218. 20 Aug 1892.
Lorteti, Iris. (Repr. Gard. Chron.) Gard. & For. **5**: 429. 7 Sep 1892.
Monspur, Iris. The Gard. **38**: 463. 15 Nov 1890.**
nepalensis var. Letha, Iris. Gard. Chron. **72**: 458–459. 15 Oct 1892.
New Irises. Gard. Chron. **91**: 385–387. 14 June 1902.*
New Irises, Some. Gard. Chron. **61**: 611. 7 May, 672. 21 May, 738. 4 June 1887.
Onco-Cyclus Group of Irises, The. The Gard. **43**: 130–135. 18 Feb 1893.**

orchioides, Iris. The Gard. 26: 181. 30 Aug 1884.
paradoxa, Iris. Gard. Chron. 87: 338, 2 June 1900.
Persian Iris, The. The Gard. 28: 89. 25 July 1885.*
Rosenbachii, Iris. Gard. Chron. 61: 390. 19 Mar 1887.
Rosenbachiana, Iris. Gard. Chron. 65: 530. 27 Ap 1889.
Season, The Iris. Gard. & For. 6: 47. 25 Jan 1893.
sindjarensis, Iris. Gard. Chron. 67: 396. 29 Mar 1890.
sindjarensis, Iris. The Gard. 53: 116. 5 Feb 1898.
sofarana, Iris. Gard. Chron. 86: 389. 25 Nov 1899.*
stylosa, Iris. The Gard. 24: 68–69. 28 July 1883.**
susiana, Iris. The Gard. 25: 15. 12 Jan 1884.
tingitana, Iris. The Gard. 33: 119. 11 Feb 1888.
vartani Iris (Xiphion). Gard. Chron. 57: 438. 4 Ap 1885.
Willmottiana, Iris. Gard. Chron. 89: 271. 27 Ap 1901.*

I suppose no one who loves his garden is entirely without books on his favorite subject; and, indeed, I have always found that a lover of gardens and flowers is also more or less a lover and reader of books. In our country villages chief applicants for books from the lending library are the gardeners, and the more they love their gardens and their flowers the more they wish to read about them; and the more they get to know from books the more they desire to know; and when cut off from their gardens by snow and frost they still find plenty of employment and pleasant work in reading their favorites; and the best gardeners are the greatest readers, for Sir Thomas Browne's saying holds good with gardening and botany as much as in other pursuits, "They do most by books, who could do much without them. . . . Different gardeners will, of course, be attracted by different books. Some will only be satisfied with purely scientific botany; others will be attracted by books treating of geographical and geological botany; others will only care for books that tell how to grow and improve flowers and each and all will find abundance of books to their different tastes."

Canon Ellacombe,
In My Vicarage Garden and Elsewhere.

RANGE IN IRIS PRICES—1927

COMPILED BY H. C. SKEELS—NOTES BY R. S. STURTEVANT

I found so much of interest in Mr. Skeels' compilation of current iris prices that I am venturing to pass it on for the benefit of all members. Although it is without the detail given in Mr. Bonnewitz' "Dress Rehearsal" in the last issue of the "Co-Operator" it is just the sort of study that almost every one who publishes a catalogue makes each year.

At first glance one would assume that it would be only a matter of collecting the eighteen catalogues checked by Mr. Skeels to take advantage of the lowest prices. This, however, is not quite the case; the report is of 1927 conditions and though each grower may know these prices, each in setting a price for 1928 will be influenced by a number of other conditions. Sales to neighboring gardeners or to non-members of the Iris Society are little effected by actual variation of price. The purchaser sees what he likes and makes no effort either to get the most talked of variety or to compare one catalogue with another and to buy where the price is lowest. Again one grower buys to sell again (incidentally he can often exchange with a private grower to great advantage) while another depends largely on his own stock (the only safe thing to insure having an expensive variety true to name) and the amount he has on hand controls the price at which he will offer the variety.

Just as there are few efficient housekeepers so are there but few careful buyers of plants and each buyer develops certain preferences as to how or where the purchase will be made.

Mr. Skeels has omitted all varieties that cost less than one dollar on the average or were not listed by at least seven firms and furthermore he has omitted figures taken from "Exchange lists" or others that show more consideration of personal likes and dislikes than of current prices. A bargain list based on a wish to get rid of things that we have too much of or dislike, particularly if it is made up by a beginner in the game, is an unmitigated nuisance. Some years ago such a list was widely advertised, orders were actually telegraphed, and yet practically no one had his order accepted as there were but a few plants available. The early bird may have caught the worm but the published cheap price set an unfair standard that brought complaints as to high proces upon every grower in the country.

I think every grower wants to sell more irises even at a lower price but it is only the experienced grower who realizes that a low price without a big stock is worse than useless.

It all goes to show that one can prove anything with statistics and that prices are at their best speculative both from the buyer's and the seller's point of view.

130 varieties are listed of which 85 are of European origin (48 English and 31 French) and only 45 American born. As there are included very few varieties introduced previous to 1918 or in fact many introduced within the last three years the disparity of two to one popular introductions would not be matched by a comparable ratio on total introductions. Either American varieties are of poorer quality, or are less advertised, or there is a strong prejudice in favor of an "Imported" variety (my own opinion as based on the study of American catalogues and advertisements), but the fact remains that we buy abroad rather than at home unless a variety is markedly outstanding or advertised as well as Mother of Pearl. French prices have been most reasonable to be sure but the English retail prices are so often specially high for Americans even aside from the duty that one wonders how long this foreign buying will continue. There are many foreign irises that I cannot do without but there are even more that were over-rated and have not proved an iota better than many of the American introductions.

Another point of some interest to be drawn from the compilation is the fact that so few nurseries list a large percentage of the same varieties, another good reason for studying catalogues. You may guess that I find more of interest in my deductions than in the actual prices, largely perhaps because the more I study prices the less surety I feel both as to the benefit I may derive in purchasing and as to their effect on those that will prevail in the ensuing year—in this case 1928.

LIST OF IRIS VARIETIES TAKEN FROM CATALOGUES OF 18 AMERICAN FIRMS, SHOWING HIGHEST, LOWEST AND AVERAGE PRICE AND NUMBER OF FIRMS CARRYING EACH VARIETY IN 1927

	High	Low	Average	No. of Firms
Ambassadeur	$ 2.00	$ .50	$ 1.00	18
Angelo	3.00	2.25	2.30	8
Ann Page	4.00	2.50	3.00	16
Anna Farr	2.00	.35	1.00	11
Anne Bullen	5.00	2.00	3.00	7
Antonio	3.50	2.00	3.00	8
Aphrodite	12.50	7.50	10.00	11
Argentina	7.50	5.00	5.70	8

	High	Low	Average	No. of Firms
Argynnis	3.00	1.00	1.40	8
Asia	4.00	2.50	3.00	15
Avalon	5.00	2.50	4.50	12
Balboa	3.50	2.50	3.00	9
Ballerine	2.00	.75	1.00	15
Black Prince	2.50	.75	1.25	11
Brandywine	5.00	.90	2.00	9
Bruno	20.00	10.00	14.00	10
B. Y. Morrison	1.50	.50	1.00	15
Canopus	10.00	2.00	4.00	12
Cardinal	20.00	15.00	19.00	8
Chalice	5.00	2.25	3.50	7
Chasseur	4.00	2.00	3.00	10
Chatelet	4.00	1.00	2.25	7
Citronella	7.50	5.00	6.00	11
Conquistador	4.00	2.50	3.00	9
Damozel	5.00	1.00	3.00	8
Daniel Lesueur	2.00	.50	1.00	9
Delicatissima	2.00	.75	1.00	10
Dominion	15.00	5.00	9.00	12
Dream	2.00	.75	1.00	15
Duke of Bedford	15.00	8.00	10.50	7
Eckesachs	2.00	.50	1.00	8
Eclaireur	5.00	1.00	2.25	7
Eden Phillpotts	3.00	.75	1.35	8
Eglamour	5.00	2.00	3.50	8
E. H. Jenkins	3.00	.75	1.35	12
Esplendido	5.00	3.00	4.00	8
Fedora	4.00	2.00	2.75	7
Flammenschwert	2.00	.75	1.00	8
George Yeld	10.00	3.00	7.50	10
Georgia	1.50	.50	1.00	12
Germaine Perthuis	15.00	10.00	12.00	7
Glamour	15.00	10.00	12.50	9
Glowing Embers	10.00	5.00	7.00	7
Gold Imperial	10.00	5.00	7.00	11
Halo	1.50	.50	1.00	11
Harpalion	2.50	1.00	2.00	7
Harriet Presby	3.00	1.50	2.00	12
Hermione	4.00	1.50	2.75	11
Hippolyta	1.50	.75	1.00	7
Imperator	4.00	2.00	3.00	9
Jacinto	5.00	2.00	3.50	7
Jacqueline Guillot	6.50	2.50	4.25	7
J. B. Dumas	5.00	1.50	2.50	9
Jean Chevereau	5.00	2.50	3.00	9
Jubilee	10.00	3.00	5.00	7
Julia Marlowe	7.50	5.00	6.00	7
Kashmir White	1.25	.75	1.00	10
Lady Byng	4.00	1.75	2.50	8
Leonato	10.00	5.00	8.00	9
Lepineaux	3.00	.75	1.50	7
Leverrier	2.50	1.25	2.00	14
Lord Lambourne	8.00	3.00	5.75	10
Magnifica	2.00	.90	1.25	18
Majestic	25.00	10.00	14.50	7
Marsh Marigold	3.00	.75	1.50	10
Mary Williamson	3.00	1.00	1.50	12
Medrano	1.50	.75	1.00	13

	High	Low	Average	No. of Firms
Menetrier	2.00	1.50	1.55	9
Mesopotamica	2.00	.75	1.00	7
Mestor	6.00	4.00	5.00	7
Midwest	2.00	.75	1.00	8
Mildred Presby	3.00	1.00	2.50	13
Milky Way	4.50	1.50	2.25	7
Mistress Ford	2.00	.65	1.25	7
Mlle. Schwartz	2.00	.75	1.25	17
Mme. Cheri	2.00	.75	1.15	15
Mme. Claude Monet	5.00	2.00	3.25	8
Mme. Durrand	5.00	1.75	3.50	14
Moa	20.00	10.00	16.00	10
M. Cornuault	5.00	1.50	3.60	7
M. Hubert	3.50	1.00	1.80	10
Morning Splendor	7.50	3.00	5.00	17
Mother of Pearl	2.00	.75	1.00	18
Mrs. Hetty Matson	5.00	2.00	3.00	7
Nimbus	4.50	2.50	3.25	7
Olivier Perthuis	2.75	1.00	1.25	8
Peau Rouge	5.00	3.00	3.60	8
Phyllis Bliss	2.50	.75	1.20	13
Pioneer	12.00	6.00	9.50	10
Prince Lohengrin	1.50	1.00	1.10	9
Princess Osra	4.00	2.00	3.00	7
Prof. Seeliger	1.75	.50	1.25	7
Prospero	2.00	.75	1.15	15
Queen Caterina	2.00	.50	1.00	18
Rajput	5.00	2.00	3.40	7
Ramona	2.00	.80	1.60	9
Regan	2.00	.75	1.50	10
Reverie	8.00	3.50	6.50	9
Rheintraube	2.00	.50	1.30	8
Richard II.	3.00	1.00	1.70	7
Robert Wallace	5.00	1.00	4.00	9
Rosado	10.00	7.50	8.60	7
Rose Madder	5.00	3.00	4.40	9
Ruby Perry	5.00	1.50	2.40	8
San Gabriel	5.00	2.50	3.50	12
Santa Barbara	10.00	7.50	8.65	7
Shekinah	2.00	.50	1.00	17
Simone Vaissiere	5.00	2.00	3.00	11
Soledad	2.00	.75	1.25	9
Souv. de Mme. Gaudichau	2.50	1.00	1.50	18
Steepway	2.00	1.00	1.20	13
Sudan	1.00	1.00	1.00	7
Sunset	2.00	1.25	1.60	16
Susan Bliss	10.00	2.00	3.90	13
Susanne Autissier	2.00	.75	1.25	10
Sweet Lavender	2.00	.50	1.50	16
Taj Mahal	6.00	3.00	4.00	8
Tartarin	2.00	.60	1.00	7
Tenebrae	10.00	4.00	7.50	10
Titan	10.00	3.00	6.25	11
Tropic Seas	7.50	4.50	6.00	8
True Charm	2.00	1.50	1.60	8
Valery Mayet	1.50	.75	1.00	13
Valkyrie	6.00	3.00	4.70	7
White Queen	1.50	.75	1.10	7
Wild Rose	4.00	1.00	2.70	11
Yeoman	5.00	1.50	3.00	8

TO-READ OR NOT-TO-READ

The Iris Society, Bulletin No. 5 (English). A most attractive bulletin that gives space to some rather controversial comments of interest both to American breeders and to our more aged Society. It seems rather a pity that so little knowledge of our work should prevail except in a few instances. As a case in point the question of Nomenclature is just receiving attention despite the fact we have both Check Lists and systems of registration in action and despite the fact that the International Conference of 1922 authorized the appointment of national committees to cooperate in the prevention of confusion in naming. Few growers abroad have seen fit to recognize our code even though they depended largely upon American sales.

Then too there is a discussion of "Irises of Yesterday" vs. "Irises of To-day" reprinted from the Canadian Horticulturist which puts a pretty low value on all irises of American origin almost without exception. Curiously enough it all started from an advertisement in Horticulture that was naturally intended to sell the surplus stock of one grower and might not reflect the real preference of even that individual. To base any conclusions for international publication upon such a source seems to me a rather amusing procedure and insofar as the lists themselves are concerned, and there are three dozen of yesterdays and three dozen of to-days, I find but one white, one variegata, and one yellow self (actually a cream) preferred or even mentioned. Surely this reveals either strong prejudices for certain colors or great lack of appreciation of range in iris hues. All lists are open to easy discussion but the shorter the list the more I want a good range of color.

The preliminary awards given at the Wisley Trials embrace both old and new varieties to such an extent that the following list will prove of little interest except as a matter of surprise. Few American varieties were sufficiently established for fair judgment. Istria, White Knight. Mystic; Rhein Nixe; Lord of June, Leonato, Gaudichau, Titan, Imperator, Kharput; Corrida, Mars, Kochii, Kurdistan; Mary Gibson, Alcazar, Tenebrae, Troades, Billia, Cardinal, Prosper Laugier, Ambassadeur; Marsh Marigold, Amber, Fro. One wonders what other varieties were at hand so easily can a similar list of worthies be selected.

Notes on a new "hardy" form of I. fimbriata, on Irises of Old, and on an American Iris Pilgrimage which is the subject of Mr. Mitchell's contribution to our own BULLETIN prove of more general interest.

The Iris Society is to be congratulated both on its success and on its selection of Messrs. Yeld, Wister, and Mottet as the first recipients of the Foster Memorial Plaques.

R. S. S.

A STUDY OF POGONIRIS VARIETIES. Memoir 100 of the Cornell University Agricultural Experiment Station and obtainable therefrom.

This is a weighty paper-covered volume with excellent illustrations both in color and black and white. The one possible criticism both of the pictures and the descriptions is that varieties were studied, of necessity, under field conditions and are therefore not shown or described as at their best. This, however, will bring a pleasant surprise to all who try them out in the garden under sheltered conditions. To my mind the greatest value of this excellent work is the presentation of botanical species with keys and descriptions, information previously available only in Mr. Dykes' expensive monograph of the genus. In addition there are many descriptions of horticultural varieties accurately stated and accompanied by a clear definition of terms and standards. These descriptions embrace varieties alphabetically arranged through F and presumably another volume will carry on the record. Here my criticism would be that all irises whatever their rating are "good cut flowers" or "good in mass" and yet I appreciate that such a record should not include personal comparative judgments. It is also well to remember that the more accurate a description may be the more it may destroy our ability to visualize and evaluate the flower itself.

Mr. Sand has done a splendid job, and, if Cornell is to continue the publication of such authoritative descriptions, each and every member of this Society should aid in sending novelties to its trial garden for study and reference.

BREVITIES

From Dr. Wylie McL. Ayres comes news of "The Iris Guild of Cincinnati and Vicinity" which like the Group in New Rochelle plans an informal association for staging an exhibit and keeping members in touch one with another. I am particularly glad to hear of this as Cincinnati seedlings deserve all sorts of praise and the competition should be strong as a number of members are breeders. Dr. Ayres is Chairman, Mrs. Waters, Vice-Chairman, and Mrs. Emigholz and Mrs. Lucius, members of the Committee elected by the twenty-five members forming the Guild.

* * * * *

The following varieties and seedlings were selected for Trial at Wisley at The Iris Society Show at Vincent Square, London, June 2, 1927.

Zaharoon TB (Dykes) Large, fawn shaded with mauve and red.
Britoness TB (Dykes) Cream, gold beard.
Tessa TB (Bliss) S. puce shaded strawberry and bronze, F. crimson maroon, bright.
Mentor TB (Perry)
Rajah TB (Wallace) "Bright blue" bicolor.
Mme. Cecile Bouscant TB (Millet 1923).
Esplendido TB (Mohr 1924).
Santa Barbara TB (Mohr-Sturt, 1925).
Allure TB (Orpington).
Winsome TB (Orpington).
Castor (Bunyard), and Olympus (Wallace) were also selected, but *as names* cannot be recognized by the American Code. Seedlings under number have not been included.

(ACCORDING TO VIEW POINT!)

"Do you know an Iris called Susiana?" queried an eastern gardener just returned on April third from California. "Great beds of this ugly, ugly flower were pridefully shown to me in every Iris garden I visited in California." And yet this Iris is one of the Oncocyclus group of which Eden Phillpotts wrote: "We do not understand them and only a rare spirit here and there has succeeded in bringing them to perfection and providing the conditions they demand. But how great the reward! Their melancholy stateliness, their solitary habit, their size, and the magic of their coloring and forms lift them above, not only all other irises, but all other flowers I have ever seen outside a dream."

FARR MEMORIAL

Ever since Mr. Farr's death, the Directors of the American Iris Society have wished to establish a suitable memorial to him. Several Committees during the last few years have suggested a number of schemes—all of which have had to be abandoned. We are glad to say that the Directors have finally decided that this memorial should take the form of a library—to consist if possible of a permanent library established in a central place and several traveling libraries in various parts of the country. We hope to have the library contain: Dykes' big book, "The Genus Iris," which is very expensive and difficult to obtain; all the smaller reference books on Iris; and bound volumes of magazine articles, of colored photographs and plates, of good catalogues, and of the BULLETINS of the American Iris Society.

Members of the American Iris Society and other friends of Mr. Farr will be asked to subscribe to a fund which will make this work possible. If the fund is large enough, part of it will be set aside as endowment, the income from which will be used to buy additional books, to pay costs of re-binding and re-editing, and perhaps to publish new books. Announcement letters have already been sent to our own members and will be sent from time to time to other groups of persons. Those having books to donate are requested to correspond with the Committee. The small Dykes book, "Irises", is particularly needed as it is out of print and cannot be secured from the book dealers.

The picture of *Iris reticulata* which adorns this BULLETIN recalls the fact that Mrs. Peckham showed this Iris blooming in an exhibition rock garden at the International Flower Show in New York in 1927. Many new-comers in the ranks of Iris devotees made first acquaintance with it there. To one of these, three coveted bulbs came as late as November seventeenth. They were potted and plunged in a cold frame with a blanket of oak leaves. On March twenty-fifth the first blossom opened. The pot was brought into the house where it continued to be a much admired decoration until April sixth. So great was the pleasure it gave that this year in July a pot of *I. gracilipes* is to be prepared, not for forcing but for easy transportation to the house where the whole delightful plant may be enjoyed close at hand when it comes naturally into bloom.

NOTICE OF ANNUAL MEETING

The 1928 Annual Meeting of the American Iris Society will be held at Freeport Country Club, Freeport, Illinois, Wednesday, June 6, 1928, at 7:30 P.M. Date subject to change according to season. Postcard notice will be mailed to all members if change is necessary.

Headquarters for Iris Society members will be at Lincoln Hotel. Reservations may be made with the hotel or through Mrs. G. W. Benfer, 1005 W. Stephenson Street. There will be a banquet at the Freeport Country Club at 6:30 P. M., just before the annual meeting. Reservations for banquet will be in charge of Mrs. L. G. Younglove, 424 S. West Ave. Before the banquet there will be a joint meeting of the Directors of the American Iris Society and the Directors of the Commerical Peony and Iris Growers' Association.

An Iris Show in conjunction with the Freeport Garden Club will be held at Odd Fellows Temple, Freeport, on June 6th and 7th. The show will open at 1:30 P. M. All entries close at 11 A. M.

On second day of show Mid West Garden Club Conference will be held at Odd Fellows Temple from 9:30 to 11:30 A. M. It is expected that Mr. Wister, Mr. Williamson, Mr. Connell, and other officers of The American Iris Society will give short talks about the work of the Society, the use of Iris in the garden, methods of staging shows, rules of judging, etc. On the afternoon of the second day of the show there will be a motor trip to Rockford and Belvidere to visit the gardens of Mr. Boehland, Mrs. Fellows, and others. The Freeport gardens may be visited at any time during the show days.

Freeport is about three hours from Chicago. Good trains leave at 8 and 10:15 A. M. on the Illinois Central and 4 P. M. on the Chicago and Northwestern. There are also direct connections from Omaha, Milwaukee, Kansas City, St. Louis, and Minneapolis.

The meetings are in charge of the following persons:

General Chairman, Mrs. W. L. Karcher, 1011 W. Stephenson St.
First Vice-Chairman, Mrs. Douglas Pattison, 871 W. Stephenson St.
Second Vice-Chairman, Mrs. A. C. Knorr, 114 N. Harlem Ave.
Secretary-Treasurer, Mrs. C. A. Sherman, 718 E. Pleasant St.
Transportation, Mrs. R. J. Stewart, 120 N. West Ave.
Information, Mrs. W. A. Stevens, 108 N. Foley Ave.
Exhibits, Mrs. W. L. Karcher, 1011 W. Stephenson St.

AMERICAN IRIS SOCIETY FIELD DAYS IN THE VICINITY OF NEW YORK CITY—1928

The Society plans to hold two Field Days in the vicinity of New York City this coming season:

1. On Friday, June 1, there will be a Field Day at the Brooklyn Botanic Garden and also the garden of Mr. Robert Wayman, Bayside, Long Island. The plan is to meet at the Brooklyn Botanic Garden about 10:30 A. M. and examine the collection of Siberian and Tall Bearded varieties. After lunch the visitors will proceed to Mr. Wayman's garden and spend the afternoon there. Each visitor should provide his own lunch, which may be eaten in the Laboratory Building. The bus fare from the Botanic Garden to Mr. Wayman's and return to Brooklyn will be about $1.25.
2. On Saturday afternoon, June 2, there will be a Field Day at the New York Botanical Garden for the study of the Tall Bearded Irises in the alphabetical collection and in the plantings for color. It is also expected that a lecture on Irises will be given at the Museum Building in the late afternoon.

All members who contemplate attending these Field Days should notify Dr. George M. Reed, Brooklyn Botanic Garden, Brooklyn, N. Y., before May 20th. To all who express an intention to attend, Dr. Reed will send detailed information of the plans.

It is also planned to hold a Japanese Iris Field Day about July 6. The main feature will be a visit to the John Lewis Childs, Inc. plantings at Fowerfield, Long Island, where several acres of Japanese Iris will be in bloom. A short time in the late afternoon or evening will be spent at the Brooklyn Botanic Garden.

It is realized that this is a late date for many to attend such a Field Day. There are, however, a few who will be interested to visit the Japanese varieties. They should communicate with Dr. Reed before June 15th, and detailed information regarding the trip will be forwarded.

IRIS EXHIBITIONS—1928

Ashland, Virginia. Spring Flower Show of the Ashland Garden Club. Mrs. George B. Hutchings, Chairman.

Boston, Mass. The Massachusetts Horticultural Society. June 9–10 or June 16–17. Mrs. W. H. Titus, 17 Sheridan Road, Swampscott, Chairman.

Cheshire, Ct. The Cheshire Garden Club. Mrs. W. H. Bassett, Main St., Chairman.

Cincinnati, Ohio. The Iris Guild. Mrs. J. F. Emigholz, Montgomery & Euclid Roads, R. R. No. 10, Secretary.

Columbia, S. C. Spring Flower Show of the Columbia Garden Club. Mrs. T. I. Weston, 2219 Divine St., Chairman.

Dallas, Texas. Garden Club of Dallas. Mrs. Gross R. Scruggs, 3715 Turtle Creek Boulevard, Chairman.

Freeport, Ill. Freeport Garden Club. June 6–7. Mrs. W. L. Karcher, 1011 W. Stephenson St., Chairman.

Harrisburg, Pa. The Iris Club of Harrisburg. Mrs. J. E. Fox, 223 North Front St., Chairman.

Lexington, Ky. Lexington Garden Club. Miss Daisy Hume, Winchester Road. Secretary.

Lynchburg, Va. Spring Flower Show. The Garden Club of Lynchburg. Miss Josephine P. Kinnier, Manager.

Providence, R. I. The Providence County Garden Club. John E. Hill, Brown University, Chairman.

Redlands, Calif. The Redlands Horticultural and Improvement Society. Dr. S. S. Berry, 1145 Highland Ave., Chairman of the Iris Section.

Richmond, Va. Spring Flower Show of the James River Garden Club. May 24–25. Mrs. Thos. S. Wheelwright, Chairman.

Seattle, Wash. Spring Flower Show of The Seattle Garden Club. H. L. Collier, Chairman of the Iris Section.

Besides the exhibitions listed above important showings of Irises are made in connection with the general spring flower shows held by garden clubs. The schedule of the Co-operative Flower Show of the Garden Clubs of Northern New Jersey, twelve clubs participating, lists nine Iris classes. These include classes for specimen stalks, for a collection of twelve varieties, for a collection of beardless varieties, for an arrangement of not less than twenty-four stalks—a great opportunity for gorgeousness—and one open only to novices. In such shows the arrangement classes usually have the largest number of entries and attract the most attention; to have one of them devoted exclusively to Irises would seem a good way to interest new people in possibilities of these flowers.

Bulletins 1920 to 1927 Inclusive

No. 1. June, 1920. The Culture of Irises in the United States. 32 pp. **Out of Print.**

No. 2. January, 1921. Garden Irises, Past and Present. 44 pp. The Development of Tall Bearded Irises in the 19th Century. Sir Michael Foster and his Irises. Registration and notes on hybridization and garden effects. **$1.00**

No. 3. June, 1921. Sir Michael Foster and his Work. 32 pp. Illustrated. **Out of Print**

No. 4. January, 1922. 34 pp. Check List (superseded by No. 8). Free on application.

No. 5. May, 1922. Symposium. 32 pp. Numerical ratings of some 700 varieties which are a most valuable guide to the relative value of standard varieties. **50 cents.**

No. 6. October, 1922. Descriptions of Varieties, Part I. 40 pp. Notes on European Irises (see also Nos. 7, 9 and 12). **$1.00**

No. 7. January, 1923. Descriptions of Varieties, Part II. 40 pp. Articles by A. J. Bliss, W. J. Caparne, and J. M. Shull. **$1.00**

No. 8. October, 1923. Check List, October, 1923. 40 pp. This, together with a supplement and lists of registrations in Nos. 14, 18, and 22, gives the authoritative list of all Iris names. Supply nearly exhausted. **50 cents.**

No. 9. December, 1923. A review of the Irises raised by William Mohr. 46 pp. Ill. A detailed review of bulbous irises and their culture. Descriptions, Part III. **$1.00**

No. 10. January, 1924. Irises for the Beginner. 60 pp. Ill. A comprehensive treatment of all irises adapted to the small garden, with recommended lists of varieties, garden, and cultural notes. The Directors consider this Bulletin worthy of a special edition and a copy is given *free to all new members*. You may well advise your gardening friends to purchase it. **On sale to non-members at 50 cents.**

No. 11. May, 1924. Beardless Irises. 40 pp. Ill. A complete and compact review of the species and varieties of this group of the iris family. The articles by W. R. Dykes are of especial interest. **$1.00**

No. 12. October, 1924. Notes and Descriptions, Part IV. 40 pp. Ill. This brings the list of descriptions up to about five hundred of the finest varieties. **$1.00**

No. 13. December, 1924. A Classification of Bearded Irises. 36 pp. The first published color classification of the group and a valuable reference. **50 cents.**

No. 14. January, 1925. Bertrand H. Farr. 68 pp. Ill. The man and his work with Irises. Official records of the Society, 1920–1925, including the Code of Nomenclature, a 1924 Bibliography of Iris Literature, the White and Black lists of varieties. **$1.00**

No. 15. April, 1925. Irises of the Future. 40 pp. Ill. Articles by Sydney B. Mitchell, B. Y. Morrison, Sherman Duffy, and others. Test Garden reports and records. **50 cents.**

No. 16. July, 1925. A Report on Sterility in Irises. 44 pp. Ill. The first scientific study of the subject and the result of research at the New York Botanical Garden. The Iris Society has been the first popular flower society to initiate and support scientific research. This Bulletin is not recommended to the casual reader. Supply limited. **50 cents.**

No. 17. October, 1925. Japanese Irises and Others. 44 pp. Ill. Prof. Miyazawa speaks of his iris work, M. Denis writes of White Irises, and others tell of their successes. It is an unusually chatty issue. **50 cents.**

No. 18. January, 1926. 48 pp. Reports of Officers and of Test Gardens. Text of Display Garden Agreement. 1925 Bibliography. 1925 Introduc-

tions and Registrations. Extracts from Les Iris dans les Jardins, by M. Correvon. $1.00

No. 19. April, 1926. W. R. Dykes. 40 pp. Ill. Dedicated to the memory of W. R. Dykes, a most interesting and permanent record of a life's work with irises. It includes the most valuable of his occasional writings. Further technical notes on sterility. 50 cents.

No. 20. July, 1926. The Iris of Gerard's Herbal. 32 pp. Illustrated from the original. Iris combinations for the garden. Reports of 1926 exhibitions. 50 cents.

No. 21. October, 1926. Planting an Iris Garden. 44 pp. Ill. Further Studies in Sterility. Iris flavissima and many odd notes from England and America. Supply limited. 50 cents.

No. 22. January, 1927. Exhibition Policy. 60 pp. Ill. 1926 Society Records. 1926 Bibliography. 1926 Introductions and Registrations. Further Sterility Studies. $1.00

No. 23. April, 1927. In Memoriam, Arthur H. Scott. 48 pp. Ill. The value of Iris breeding by S. B. Mitchell. Is scientific research necessary? 1926 Test Garden reports, from the New York Botanical Garden, Brooklyn Botanic Garden, Cornell University, Missouri Botanic Garden. Regelia and Oncocyclus Iris. Book reviews. 50 cents.

No. 24. July, 1927. 40 pp. European Iris notes. Reports of 1927 exhibitions. Regelio-Cyclus Irises in Canada. Book reviews. 50 cents.

No. 25. October, 1927. Early Dwarf Bearded Iris. 40 pp. Early flowering species and varieties and their use in the garden. List of Hybrid Iris of W. J. Caparne. Old Iris names. Discussion of the problems of the Iris breeder. 50 cents.

Please note the Bulletins No. 1 and No. 3 are out of print.

For the convenience of members who have joined during the past five years and who wish to complete their sets, the following bulletins are offered in sets at reduced prices.

Set A. Nos. 2, 4– 9, inclusive. $5.00
Set B. Nos. 2, 4–13, inclusive. $6.50
Set C. Nos. 2, 4–17, inclusive. $8.00
Set D. Nos. 2, 4–21, inclusive. $9.50
Set E. Nos. 2, 4–25, inclusive. $11.00

We can also supply the following bulletins of the English Iris Society:
No. 1. 50 cents each. **No. 4. $1.00 each.**
(Nos. 2 and 3 are out of print.)

Iris numbers of Addisonia. Published by the New York Botanical Garden.
No. 1. $2.00 **No. 2.** $2.00

NOTICE

Details of the $100.00 Prize offered by Robert Wayman will be found on page 40 of BULLETIN No. 15.

Publications available from Science Press Printing Co., Lancaster Pa. Checks payable to American Iris Society.

In order to eliminate the waste of time and effort in arranging for international money orders or drafts—

THE AMERICAN IRIS SOCIETY

and

THE IRIS SOCIETY (OF ENGLAND)

are happy to announce

A CO-OPERATIVE MEMBERSHIP AGREEMENT

Application for membership in The Iris Society (of England) may be sent direct to the American Iris Society office. Make check for dues ($2.85) payable to American Iris Society; send it to Science Press Printing Co., Lime and Green Streets, Lancaster, Pa. Mark it plainly "For dues for The Iris Society (OF ENGLAND)" and print your name and address.

The object of this service is to increase the popularity of the Iris in both countries and to help build up international friendship and understanding.

AMERICAN PEONY SOCIETY

Twenty-five years ago a small group of peony enthusiasts met and formed the American Peony Society for the purpose of increasing public interest in the peony and establishing a standard nomenclature. Bulletins have been issued during that period dealing with various phases of the peony such as culture, propagation and production of new varieties. Various exhibitions have been held annually and worthy prizes offered in numerous classes comprising the best to be found in the different types of peonies. This interest has increased from year to year and a steady growth of membership has been recorded. Medals are awarded each year in various sections of the country where local peony shows are held to encourage exhibitions of bloom and promote general interest.

At present annual dues are three dollars per year which includes all publications issued by the Society during the year. Back bulletins can be secured by members at a nominal sum. No formal application necessary. Anyone interested in flowers eligible. We heartily extend an invitation to join us in our work.

All remittances should be made to the order of the

AMERICAN PEONY SOCIETY

and sent to

W. F. CHRISTMAN, Secretary
Robbinsdale, Minn.

Cedar Hill Nursery

BROOKVILLE

Glen Head, Nassau Co., N. Y.

PEONIES LILACS

IRISES

T. A. Havemeyer
Owner

Albert Lahodny
Manager

CHOICE IRISES

from

SUNNYSIDE GARDENS

Natick, Mass.

Germaine Perthuis	each	$7.50
Aphrodite	"	5.00
Souv. de Loetitia Michaud	"	5.00
Geo. J. Tribolet	"	5.00
Pioneer	"	5.00
Leonato	"	4.00
Mary Gibson	"	3.00
Morning Splendor	"	3.00
Robert W. Wallace	"	3.00
Susan Bliss	"	1.50
Lady Byng	"	1.00
Zada, the best pure, snow-white Iris yet introduced	"	3.50

Send for complete descriptive list of over 100 BEST VARIETIES only. If interested ask for Gladiolus list also.

PEONIES

Strong Well Grown Plants
Hundreds of Varieties
Prompt and Careful Service

IRISES

Send for Catalog and Plan to Visit these Gardens, as Visitors are always Welcome.

C. F. WASSENBERG,
Peony & Iris Gardens, Van Wert, Ohio

My 1928 catalogue will be ready about March 1st, listing about 90 distinct species and varieties of
DWARFS.
Also a select list of
TALL BEARDED and REGELIO-CYCLUS HYBRIDS.
Catalogue on request.
Huron Valley Iris Gardens
Sam Burchfield Ann Arbor, Mich.

E. B. Williamson Paul H. Cook

The Glen Road Iris Gardens
Wellesley Farms, Mass.

We list new introductions and a selection of the finest American and European varieties

GRACE STURTEVANT
VIOLET F. EDLMANN
Proprietors

A Collection of Unusual Iris

10 strong, labeled roots of fine iris not so well known, as Prospero, Ambigu, Knysna, etc., is offered for $5.25 postpaid. Cat. value, $7.50.

KENWOOD IRIS GARDENS
(Mrs. J. F. Emigholz)
R. R. No. 10, Box. 230F Cincinnati, Ohio

IRISES

Descriptive list of my introductions sent on request.

C. H. HALL
Ingomar, Pa.

Come out and See the Iris in Bloom

My exhibit this year will be finer than ever. I hope to have blooming such varieties as Wm. R. Dykes, the famous new yellow; San Francisco and Los Angeles, the Giant flowered Plicatas; Grace Sturtevant, Wm. Mohr and others of the aristocrats; the new Sass varieties, including some as yet not introduced. In fact, I have the most noted European and American 1926 and 1927 introductions. There is also a fine collection of Siberian and Japanese Iris, Iris species and types, Evansias, Regelias, Oncocyclus, Regeliocyclus, Spurias, etc. Just at this writing (March 1st) Reticulata Cantab is in bloom in a cold frame.

30 minutes from Penna. Sta., N. Y., via Long Island R. R.

Robert Wayman

Bayside, L. I. New York

IRISES

Best Standard and Rare Sorts.
Also our 1928 Introductions:
"WHITE and GOLD"
"WHITE STAR"
Will list Peonies also 1929

J. C. NICHOLLS
114 Overlook Road Ithaca, N. Y.

Announcing
SAGAMORE
(Berry 1928)
A royally arrayed new *fulva* hybrid.
Strong roots, foundation stock.
$25 each.

S. S. BERRY,
1145 West Highland Ave.,
Redlands, Calif.

DO YOU KNOW THAT
THE AMERICAN HORTICULTURAL SOCIETY

publishes for its members a quarterly magazine of general horticultural interest with no excursions into the realms of architecture, interior decoration or the like, confining its attention to strictly garden matters? In it you will find various iris notes and portraits as authoritative as that of *Iris reticulata* printed above, with other garden information of interest and value.

Mr. D. Victor Lumsden, 1629 Columbia Road, Washington, D. C., the secretary of the society, will welcome applications for membership. The annual dues are three dollars and all remittances should be payable to the society. You are most cordially invited to become a member.